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ABSTRACT

This bibliographical study of colleges and their libraries established during the colonial and early national periods of American history concerns both institutional histories and the availability of books and the nature of the collections in these institutions' libraries. It identifies sources which will aid the library historian and calls attention to the gaps and desiderata in the literature on this subject. The essay supports the notion that early American college libraries developed as an important part of the total higher educational process. An introductory survey of early American college characteristics is followed by bibliographies and general resource listings for both colleges and libraries. The remainder of the bibliographic essay is arranged by founding dates of the nine colonial colleges. A brief section at the end discusses the libraries of several colleges founded in post-Revolutionary America. (Author/FM)

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THE HISTORY OF AMERICAN COLLEGES AND THEIR LIBRARIES IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES: A BIBLIOGRAPHICAL ESSAY

by

David S. Zubatsky

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DAVID S. ZUBATSKY

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ABSTRACT

This bibliographical study of colleges and their libraries established during the colonial and early national periods of American history is concerned both with institutional histories and with the availability of books and the nature of the book collections in these institutions' libraries. Its purpose is to identify those sources which will aid the library historian, the specialist in the history of higher education, or the interested nonspecialist in becoming aware of the fascinating cultural history of early American colleges and their libraries. It will also attempt to call attention to the gaps and desiderata in the literature on this subject. The essay's contents support the truism that early American college libraries did not develop as isolated and independent agencies existing in a social vacuum, but as an important part of the total higher educational process.

An introductory survey of the general characteristics of early American colleges is followed by bibliographies and general resource listings for both early American colleges and libraries. The remainder of the bibliographic essay is arranged by founding dates of the 9 colonial colleges. A brief section at the end of the essay discusses the libraries of a few colleges founded in post-Revolution America.

INTRODUCTION

Transplanted in America from England and transformed by the educational ideas and values of the colonial family, church and community, the institutions of higher education emerged at the end of the eighteenth century with distinctively American traits.

The English university served as the first model for the American college. Like its model, it upheld the tradition of a prescribed liberal arts curriculum based upon a primarily classical preparatory course; it was deeply concerned with the forming of moral character and the conserving of existing knowledge rather than the search for new knowledge; it placed great value on a residential pattern of life for students; and its major role was the training of a special elite for community leadership in all fields of endeavor.

Yet there were distinctively American characteristics in the development of these colleges produced by the unique conditions of the physical and social environment of the nation. The American college, unlike its British counterpart, was not composed of "colleges" grouped around a great, central university, but developed rather as an autonomous institution. Both royal charter constraints and the vast distances between cities led to the establishment of a number of widely separated degree-granting colleges, thus diffusing educational effort.

In the area of governance, collegiate boards of control had been established by the eighteenth century. These boards were interdenominational, reflecting the heterogeneity of the American population. By the time of the Revolution, the administrative pattern in American colleges (except for Harvard) consisted of a board of trustees, usually composed of ministers, state officials and laymen, while the college president served *ex officio* as the board's executive officer for the administration of day-to-day affairs. This arrangement, unique among universities of the period, placed the major decisions concerning educational aims, academic standards and financial policy almost wholly in nonacademic hands.

In terms of finances, these early American colleges enjoyed none of the financial security of their British and Scottish counterparts, and far less public or state support. Finally, since colonial students often entered college with scanty academic preparation (because of the paucity of good precollege schools) and at a very early age, American colleges provided training of a much less advanced nature than that of British or Continental universities.

Following the Revolution, however, the "typical" colonial college was transformed from an undergraduate school or arts faculty, often linked to a grammar school, to one with university status through the introduction of professional studies in law and medicine. In contrast to European conditions, the Revolution did not abolish a single college, nor did it subordinate these institutions to the direct authority of the states as administrative departments or agencies. Still, many saw their students and faculties dispersed and their buildings destroyed by armed conflict or its side effects of occupation and neglect, and all had to adjust to the changes in sovereignty. There were disputes between governing boards and post-Revolution legislatures over their legal status, but in the end the colleges survived with their charters intact or modified with the consent of their governing boards.

GENERAL BIBLIOGRAPHIES AND OTHER SOURCES

Higher Education in Colonial and Early National America

Bibliographical Guides

Bibliographical guides and other reference works are probably the best starting points for more extensive studies of higher education in the colonial and early national periods. Of all available bibliographical guides to higher educational writings, the following are particularly valuable: Bernard Bailyn's "Bibliographical Essay," which forms over half the text of his outstanding book, *Education in the Forming of American Society: Needs and Opportunities for Study* (Chapel Hill, University of North Carolina Press, 1960); Mark Beach, *A Bibliographic Guide to American Colleges and Universities from Colonial Times to the Present* (Westport, Conn., Greenwood Press, 1975); Francesco Cordasco and William W. Brickman, eds., *A Bibliography of American Educational History: An Annotated and Classified Guide* (New York, AMS Press, 1975); Jurgen Herbst, *The History of American Education* (Northbrook, Ill., AHM, 1973); and Joe Park, *The Rise of American Education: an Annotated Bibliography* (Evanston, Ill., Northwestern University Press, 1965). The yearly "Bibliography of Current Periodical Literature in Educational History," which appears in the *History of Education Quarterly* should also be consulted.

Biographies

Although there are, with some notable exceptions, few definitive biographies of colonial academicians, there are some indexes to biographical references which will serve as guides for the researcher. William D. Carrell's "Research Studies: Biographical List of American College Professors to 1800" (*History of Education Quarterly* 8:358-74, 1968) lists references to articles and books containing information on the lives of 142 early American college faculty members and administrators. A brief listing of biographies of educators is also contained in Franklin Parker's "Biographies of Educators: Partial Bibliography of 153 Doctoral Dissertations" (*Peabody Journal of Education* 40:142-49, 1962). Another reliable reference tool is the still basic *Dictionary of American Biography* (20 vols., New York, Scribners, 1928-37) which contains brief biographies with bibliographies appended. The index volume contains the following helpful divisions: a subject index, an alphabetical list of biographies, a list of schools and colleges attended by the subjects of the biographies, and a list of occupations of the biographies' subjects. *The Biographical Dictionary of American Educators* (3 vols., Westport, Conn., Greenwood Press, 1978), edited by John F. Ohles, details the contributions of more than 1600 teachers, reformers, theorists and administrators to the development of American education from colonial times to 1976. Biographies of their professional predecessors were contributed by 465 scholars and administrators. Each biographical sketch contains a short description of the subject's education, professional accomplishments, and contribution to the educational movement, in addition to complete personal data. Bibliographical data for further study are included for each educator. Five appendices provide information on place of birth, the state of major service of each educator, major field of work, a chronology by years of birth, and a list of important dates in American education.

Readings and Source Books

Readings and source books in American educational history also serve as a worthwhile introduction to higher learning practices in the colonies. Three of the more recent books of this category are: David B. Tyack, *Turning Points in American Educational History* (Waltham, Mass., Blaisdell, 1967) which includes a particularly perceptive section on Benjamin Franklin's educational philosophy; F. Wilson Smith, *Theories of Education in Early America, 1655-1819* (Indianapolis, Bobbs-Merrill, 1973); Frederick Rudolph, *Essays on Education in the Early Republic* (Cambridge, Mass., Harvard University Press, 1965); and Sol Cohen, ed., *Education in the United States: A Documentary History* (5 vols., New York, Random House, 1974). Volume 2 of Cohen's book contains reprints of the documents on colleges under the following categories: Colonial Beginnings, the "Great Awakening," Student Life, Education for the New Nation, and the States and Colleges. Two more rather prominent source books that preceded these works are: Ellwood P. Cubberley, *Readings in Public Education in the United States* (Boston, Houghton Mifflin, 1934); and Edgar W. Knight and Clifton L. Hall, *Readings in American Educational History* (New York, Appleton-Century-Crofts, 1951).

General Educational Histories

The numerous works that describe the history of American education naturally include a treatment, although a minor one in most texts, of higher education in the colonial and early national periods. Because of inconsistencies, distortion of facts, personal pedagogical prejudices, and generalizations, pre-1945 works should be consulted with caution. Such texts include: Richard G. Boone, *Education in the United States: Its History from the Earliest Settlements* (New York, D. Appleton, 1889); Edwin G. Dexter, *A History of Education in the United States* (New York, Macmillan, 1904); Stuart Noble, *A History of American Education* (New York, Farrar & Rinehart, 1938); and Elwood P. Cubberley's widely known but controversial survey, *Public Education in the United States: A Study and Interpretation of American Educational History* (Boston, Houghton Mifflin, 1919).

Histories of education published since 1945 usually display more adequate and acurate treatment of the colonial period. One of the best examples of this improvement in scholarship is found in R. Freeman Butts and Lawrence A. Cremin's *A History of Education in American Culture* (New York, Holt, 1953), which emphasizes the extent to which education was shaped by social institutions, forces and trends. Cremin followed this book with a significant article entitled "The Recent Development of the History of Education as a Field of Study in the United States" (*History of Education Journal* 7:1-35, 1955/56) and his masterful study *American Education: The Colonial Experience, 1607-1783* (New York, Harper & Row, 1970). The latter discusses the intellectual inheritances from Europe that so strongly influenced the societal institutions of the early English colonists, as well as the various roles that learning played in colonial society through the period of the American Revolution. An extensive and detailed bibliographical essay concludes this monumental work.

Other noteworthy educational histories include: Sheldon S. Cohen, *A History of Colonial Education, 1607-1776* (New York, Wiley, 1974); David L. Madsen, *Early National Education, 1776-1830* (New York, Wiley, 1974); Clarence J. Karier, *Man, Society, and Education: A History of American Educational Ideas* (Glenview, Ill.. Scott, Foresman, 1967); Vivian T. Thayer, *Formative Ideas in American Education from the Colonial Period to the Present* (New York, Dodd, Mead, 1965); Harry G. Good, *A History of American Education* (New York, Macmillan, 1956); Rena L. Vassar, *A Social History of American Education* (vol. 1, Chicago, Rand McNally, 1965); and Rush Welter, *Popular Education and Democratic Thought in America* (New York, Columbia University Press, 1965).

Specific surveys and general studies of higher education include: John S. Brubacher and Willis Rudy's masterful *Higher Education in Transition: A History of American Colleges and Universities, 1636-1976* (3d ed. rev., New York, Harper & Row, 1976) which emphasizes the broadening and democratization of Western European antecedents in the American setting, and discusses the patterns of financing, governance, organization, curriculum, instruction and student life in the colonial colleges; Albert Castel, "The Founding Fathers and the Vision of a National University" (*History of Education Quarterly* 4:280-302, 1964); Phyllis V. Erenberg, "Change and Continuity: Values in American Higher Education, 1750-1800" (Ph.D. diss., University of Michigan, 1974); Jerome Fink, "The Purposes of the American Colonial Colleges" (Ph.D. diss., Stanford University, 1958); Richard Hofstadter and C. DeWitt Hardy, *The Development and Scope of Higher Education in the United States* (New York, Columbia University Press, 1952); Richard Hofstadter and F. Wilson Smith, *American Higher Education: A Documentary History* (2 vols., Chicago, University of Chicago Press, 1961), which is particularly useful for its illustration of changing ideas of higher education through presentation of statutes, charters, statements, arguments, plans, reports, etc. on the history of colleges and universities from 1633 to the mid-twentieth century; Edgar W. Knight, *Documentary History of Education in the South before 1860* (vols. 1 and 2, Chapel Hill, University of North Carolina Press, 1949-53); Beverly McAnear, "College Founding in the American Colonies, 1745-1775" (*Mississippi Valley Historical Review* 42:24-44, 1955); Frederick Rudolph, *The American College and University* (New York, Alfred A. Knopf, 1962); George P. Schmidt, *The Liberal Arts College: A Chapter in American Cultural History* (New Brunswick, N.J., Rutgers University Press, 1957); Donald G. Tewksbury, *The Founding of American Colleges and Universities before the Civil War: With Particular Reference to the Religious Influences Bearing upon the College Movement* (New York, Teachers College, Columbia University, 1932), a most influential work of the past half-century whose usefulness has begun to decline due to more critical work done on his theses and interpretations by contemporary educational historians; Charles F. Thwing, *History of Higher Education in America* (New York, D. Appleton-Century, 1906); Phyllis Vine, "The Social Function of Eighteenth Century Higher Education" (*History of Education Quarterly* 16:409-24, 1976); and Brother Agatho Zimmer, "Changing Concepts of Higher Education in America Since 1700" (Ph.D. diss., Catholic University of America, 1938).

Surveys of General Studies of Higher Education

Other useful background studies include: Vera M. Butler, "Education as Revealed by New England Newspapers Prior to 1850" (Ph.D. diss., Temple University, 1936); Theodore R. Crane, ed., *The Colleges and the Public, 1787-1862* (New York, Bureau of Publications, Teachers College, Columbia University, 1963); Allen Oscar Hansen, *Liberalism and American Education in the Eighteenth Century* (New York, Macmillan, 1926); Jurgen Herbst, "The American Revolution and the American University" (*Perspectives in American History* 10:279-354, 1976); Margaret W. Masson, "The Premises and Purposes of Higher Education in American Society, 1745-1770" (Ph.D. diss., University of Washington, 1971); Samuel Eliot Morison, "American Colonial Colleges" (*Rice Institute Pamphlet* 23:246-82, 1936); George Newsome, "American University Patterns, 1776-1900" (Ph.D. diss., Yale University, 1956); David W. Robson, "Higher Education in the Emerging American Republic, 1750-1800" (Ph.D. diss., Yale University, 1974); Donald O. Schneider, "Education in Colonial American Colleges, 1750-1770, and the Occupation and Political Offices of Their Alumni" (Ph.D. diss., George Peabody, 1965); Willard W. Smith, "Relations of College and State in Colonial America" (Ph.D. diss., Columbia University, 1949); Edgar Bruce Wesley, *Proposed: The University of the United States* (Minneapolis, University of Minnesota Press, 1936); Homer H. Young, "The 'National University' of the Early National Period" (*Educational Forum* 15:343-52, 1953); and Frank Klassen, "Persistence and Change in Eighteenth Century Colonial Education" (*History of Education Quarterly* 2:83-99, 1962), which briefly discusses religion and the classics as being the two persistent influences providing the basic framework of colonial educational endeavor and the third major influence, the growing scientific revolution and its relationship to the eighteenth-century outlook, is also examined.

English and Scottish Influences on American Colleges

The influences of English and Scottish universities upon the development and growth of American colleges throughout the period are best described in the following works: Edward Eggleston, *The Transit of Civilization from England to America in the Seventeenth Century* (New York, Appleton, 1901); David C. Humphrey, "Colonial Colleges and English Dissenting Academies: A Study in Transatlantic Culture" (*History of Education Quarterly* 12:184-97, 1972); Michael Kraus, *The Atlantic Civilization: Eighteenth Century Origins* (Ithaca, N.Y., Cornell University Press, 1949); William C. Lehmann, "The Impact of Scottish Educational Ideas and of the Scottish Universities Upon Education in America" in his *Scottish and Scotch-Irish Contributions to Early American Life and Culture* (Port Washington, N.Y., Kennikat Press, 1978, pp. 107-27); A.P. Middleton, "Anglican Contributions to Higher Education in Colonial America" (*Pennsylvania History* 25:251-68, 1958); Douglas Sloan, *The Scottish Englightment and the American College Ideal* (New York, Teachers College Press, 1971); and George Smith Pryde, *The Scottish Universities and the Colleges of Colonial America* (Glasgow, Jackson, 1957).

Religious Educational Aims

Among the many studies concerning religious educational aims of the early American college are: H.H. Brinton, "The Quaker Contribution to Higher Education in Colonial America" (*Pennsylvania History* 25:234-50, 1958); Mary L. Gambrell, *Ministerial Training in Eighteenth Century New England* (New York, Columbia University Press, 1937); Evarts B. Greene, "The Anglican Outlook on the American Colonies in the Early Eighteenth Century" (*American Historical Review* 20:64-85, 1914/15); David J. Maitland, "Puritans and University Reform" (*Journal of Presbyterian History* 43:100-23, 1965); G.H. Miller, "A Contracting Community: American Presbyterians, Social Conflict and Higher Education, 1730-1820" (Ph.D. diss., University of Michigan, 1970); William O. Shewmaker, "The Training of the Protestant Ministry in the United States of America before the Establishment of Theological Seminaries" (*Papers of the American Society of Church History*, 2d series, 6:73-102, 1921); Samuel Simpson, "Early Ministerial Training in America" (*Papers of the American Society of Church History*, 2d series, 2:117-129, 1910); C.H. Geiger, *The Program of Higher Education of the Presbyterian Church in the United States of America: An Historical Analysis of Its Growth in the United States* (Cedar Rapids, Iowa, Laurance Press, 1940); Thomas C. Pears, "Colonial Education among Presbyterians" (*Journal of the Presbyterian Historical Society* 30:115-26, 165-74, 1952); Francis Patrick Cassidy, "Catholic College Foundations and Development in the United States, 1677-1850" (Ph.D. diss., Catholic University, 1924); Edward J. Power, *Catholic Higher Education in America: A History* (New York, Appleton-Century-Crofts, 1972, pp. 3-35); and Leon Hühner, "Jews in Connection with the Colleges of the Thirteen Original States Prior to 1800," in his *Jews in America in Colonial and Revolutionary Times* (New York: Gertz Bros., 1959, pp. 165-88, originally published in 1910).

Patterns of Organization, Administration and Finance

Patterns of organization, governance, administration and financing are well described in the following specialized studies: Merle E. Curti and Roderick Nash, *Philanthropy in the Shaping of American Higher Education* (New Brunswick, N.J., Rutgers University Press, 1965), an interesting historical account of one of the significant factors in the shaping of America's unique colleges and universities; Richard G. Durnin, "The Role of the Presidents in the American Colleges of the Colonial Period" (*History of Education Quarterly* 1:23-31, 1961), a survey of the presidents of the colonial American colleges, their duties and their accomplishments; Jurgen Herbst, "The Eighteenth Century Origins of the Split between Private and Public Higher Education in the United States" (*History of Education Quarterly* 15:273-80, 1975); Beverly McAnear, "The Raising of Funds by the Colonial Colleges" (*Mississippi Valley Historical Review* 38:591-612, 1952); James Scanlon, "College Presidents in the Eighteenth Century" (*History of Education Quarterly* 11:72-114, 1971); George P. Schmidt, *The Old Time College President* (New York, Columbia University Press, 1930), a well-documented classic study of the role and influence of the American college president from 1760 to 1860; Willard Smith, "Relations of College and State in Colonial America" (Ph.D. diss., Columbia University, 1949); John S. Whitehead, *The Separation of College and State: Columbia, Dartmouth, Harvard and Yale, 1776-1876* (New Haven, Conn., Yale University Press, 1973), which illustrates the quasi-public character of private colleges during the first century of the Republic by noting that all of these institutions were dependent to some degree on state funds for support; Jurgen Herbst, "From Religion to Politics: Debates and Confrontations over American College Governance in the Mid-Eighteenth Century" (*Harvard Educational Review* 46:397-424, Aug.

1976), which "traces the evolution of college governance from the early eighteenth century, when church and state exercised joint control, to the mid-eighteenth century, when religious, secular, and political tensions strained the effectiveness of that model" with the consequence of a more pluralistic model of college governance developing and provoking "the proliferation of private or church-related colleges in the nineteenth century";[1] Edward H. Reisner, "The Origin of Lay University Boards of Control in the United States" (*Columbia University Quarterly* 23:63-69, 1931); Olthea L. Stoeckel, "Politics and Administration in the American Colonial Colleges" (Ph.D. diss., University of Illinois, 1958); Frank W. Blackmar, *The History of Federal and State Aid to Higher Education in the United States* (Washington, D.C., USGPO, 1890, pp. 21-400), which contains a wide range of research extending from the earliest colonial records and charters to 1890; Jesse B. Sears, *Philanthropy in the History of American Higher Education* (U.S. Bureau of Education Bulletin No. 26, Washington, D.C., USGPO, 1922); Robert C. Davidson, "The Growth and Development of Public Relations Programs in American Colleges and Universities" (Ph.D. diss., University of Southern California, 1956); Noel C. Stevenson, "Hereditary Scholarships" (*American Genealogist* 36:96-99, 192, 1960); and Samuel K. Wilson, "The Genesis of American College Government"(*Thought* 1:415-33, 1926).

A seminal work on the governance patterns of early American colleges, especially those of Harvard, William and Mary, and Yale is Jurgen Herbst's "The First Three American Colleges: Schools of Reformation," in Donald Fleming and Bernard Bailyn, eds., *Perspectives in American History* (Cambridge, Mass., Charles Warren Center for Studies in American History, Harvard University, 1974, vol. 8,pp.7-52). The author's purpose is to explore the implications of the following statement:

> The first three colleges found in the English-speaking colonies in North America—Harvard, William and Mary, and Yale—have one feature of their early existence in common: they did *not* begin their careers as incorporated colleges or universities as such institutions were then known in Europe. Rather, they were created as unincorporated provincial Latin grammar boarding schools governed by trustees, and as such they are more closely related in conception and in governmental practice to the contemporary academic institutions of Reformed Europe—*gymnasia illustria*, academies, or *Gelehrtenschulen* on the Continent and the independent grammar schools of Elizabethan England or the dissenting academies after 1662—than to the medieval universities. If one is to understand the origins and early development of American higher education this fact must first of all be understood, though it runs counter to much has been written on the subject.[2]

An excellent review of the literature on governance is also included in the article.

College Selection and Entrance Examinations

Few detailed studies are available which describe college selection and entrance requirements. However, among these, Edwin C. Broome's *A Historical and Critical Discussion of College Admission Requirements* (New York, Macmillan, 1903; reprinted New York, College Entrance Examination Board, 1968) and Beverly McAnear's "The Selection of an Alma Mater by Pre-Revolutionary Students" (*Pennsylvania Magazine of History and Biography* 73:429-40, 1949) are the basic sources.

College Curriculum and Instruction

In the area of colonial college curriculum and instruction, many studies have been published. These include such general studies as: Frederick Rudolph, *Curriculum: A History of the American Undergraduate Course of Study Since 1836* (San Francisco, Jossey-Bass, 1977), a scholarly, well-written account of the development of the curricula in higher education; Joe W. Kraus, "The Development of a Curriculum in the Early American Colleges" (*History of Education Quarterly* 1:64-76, 1961), which discusses in detail the development of curriculum from a seventeenth-century Cambridge model to distinct American variations by the latter part of the eighteenth century; Colyer Meriwether, *Our Colonial Curriculum, 1607-1776* (Washington, D.C., Capitol, 1907), a classic work; Richard M. Gummere, *The American Colonial Mind and the Classical Tradition: Essays in Comparative Culture* (Cambridge, Mass., Harvard University Press, 1963); Robert Middlekauff, "A Persistent Tradition: The Classical Curriculum in Eighteenth Century New England" (*William and Mary Quarterly*, 3d series, 18:54-67, 1961); Louis F. Snow, *The College Curriculum in the United States* (New York, Teachers College, 1907); James J. Walsh, *Education of the Founding Fathers of the Republic: Scholasticism in the Colonial Colleges, a Neglected Chapter in the History of American Education* (New York, Fordham University Press, 1935); Meyer Reinhold, "Opponents of Classical Learning in America during the Revolutionary Period" (*Proceedings of the American Philosophical Society* 112:221-34, 1968), which traces the opposition to the classical curriculum in America before, during and after the Revolution by such critics as Franklin, Paine, Webster and Rush, who argued that classical studies were irrelevant to a society which needed practical knowledge (in noting the critics' failure, the author disagrees with them and makes a brief statement in favor of the utility of the classics); Robert F. Seybolt, "Notes on the Curriculum in Colonial America" (*Journal of Educational Research* 12:275-81, 370-78, 1925); and Richard J. Storr, *The Beginnings of Graduate Education in America* (Chicago, University of Chicago Press, 1953), which covers the period 1786-1860.

A large number of important studies have been published dealing with the role and influence of science within the college curriculum: "The Early History of Science and Learning in America" (*Proceedings of the American Philosophical Society* 86:1-204, 1942; 87:1-119, 1943); Whitfield J. Bell, *Early American Science: Needs and Opportunities for Study* (Williamsburg, Va., Institute of Early American History and Culture, 1955), which contains an excellent bibliographical essay and a list of publications about early American scientists; Frederick E. Brasch, "The Newtonian Epoch in the American Colonies" (*Proceedings of the American Antiquarian Society* 49:314-22, 1939) and *The Royal Society of London and Its Influence Upon Scientific Thought in America* (New York, Science Press, 1931); R.M. Brown, "Agricultural Science and Education in Virginia Before 1860" (*William and Mary Quarterly*, 2d series, 19:197-213, 1939); I. Bernard Cohen, *Some Early Tools of American Science: An Account of the Early Scientific Instruments and Mineralogical and Biological Collections in Harvard University* (Cambridge, Mass., Harvard University Press, 1950), an extremely valuable work on science and education in the colonial college whose title belies its importance; Charles E. Ford, "Botany Texts: A Survey of the Development in American Higher Education" (*History of Education Quarterly* 4:59-71, 1964); Richard L. Greaves, "Puritanism and Science: The Anatomy of a Controversy" (*Journal of the History of Ideas* 30:345-68, 1969); Brooke Hindle, *The Pursuit of Science in Revolutionary America, 1735-1789* (Chapel Hill, University of North Carolina Press, 1956), an excellent study which describes the varied scientific interests, training and contributions of the colonial Americans; Richard H. Shryock, "American Indifference to Basic Science during the Nineteenth Century" (*Archives Internationales d'Histoire des Sciences*, no. 5, 1948, 50-65); Frederick C. Waite, "Position of Astronomy in American Colleges of the Colonial Period" (*Bulletin of the Association of American Colleges* 26:416-20, 1940); Abraham Wolf, *A History of Science, Technology, and Philosophy in the Eighteenth Century* (2d ed., London, Allen and Unwin, 1952); William Smallwood and Mabel Smallwood, *Natural History and the American Mind* (New York, Columbia University Press, 1941; reprinted New York, AMS Press, 1967); Dirk Struik, *Yankee Science in the Making* (Boston, Little, Brown, 1948); Winthrop Tilley, "The Literature of Natural and Physical Science in the American Colonies from the Beginnings to 1765" (Ph.D. diss., Brown University, 1933); and Theodore S. Hornberger's masterful study, *Scientific Thought in the American Colleges, 1639-1800* (Austin, University of Texas Press, 1945), which covers the history of science in education and the first American colleges' entrance requirements, curriculum, teaching methods, textbooks and libraries.

Of equal interest are: Herbert Leventhal, "In the Shadow of the Enlightenment: Occultism and Renaissance Science in 18th-Century America" (Ph.D. diss., City University of New York, 1973); David L. Wilmarth, "A History of the Development of Science Education in American Colleges, 1800-1860" (Ph.D. diss., Boston College, 1970); H.S. Van Klooster, "The Beginnings of Laboratory Instruction in Chemistry in the United States" (*Chymia* 2:1-15, 1949); John J. McCarthy, "Physics in American Colleges Before 1750" (*American Physics Teacher* 7:100-04, 1939); and Lyman C. Newell, "Chemical Education in America from the Earliest Days to 1820" (*Journal of Chemical Education* 53:402-04, July 1976).

Communication among colonial scientists and between them and European scientists and other scholars are discussed in: Margaret Denny, "The Royal Society and American Scholars" (*Scientific Monthly* 65:415-27, 1947); Bernard Faÿ, "Learned Societies in Europe and America in the Eighteenth Century" (*American Historical Review* 37:255-66, 1932); Frederick G. Kilgour, "The Rise of Scientific Activity in Colonial New England" (*Yale Journal of Biology and Medicine* 22:123-38, 1949); David G. Null, "Communication among Scientists in Colonial America" (Master's thesis, University of Chicago, Graduate Library School, 1978); and Raymond P. Stearns, "Colonial Fellows of the Royal Society of London, 1661-1778" (*Osiris* 8:73-121, 1948), and *Science in the British Colonies of America* (Urbana, University of Illinois Press, 1970).

Mathematical instruction in colonial colleges is covered by: Florian Cajori, *The Teaching and History of Mathematics in the United States* (Washington, D.C., USGPO, 1890); Herbert Kimmel, "The Status of Mathematics and Mathematical Instruction during the Colonial Period" (*School and Society* 9:195-202, 1919); Lao G. Simons, "The Influence of French Mathematics at the End of the Eighteenth Century upon the Teaching of Mathematics in American Colleges" (*Isis* 15:104-23, 1931) and *Introduction of Algebra into American Schools in the Eighteenth Century* (Washington, D.C., USGPO, 1924); and David E. Smith, *History of Mathematics in America Before 1900* (Chicago, Open Court, 1934).

Studies on medical education and medical students include: George W. Corner, "Apprenticed to Aesculapius: The American Medical Student, 1765-1965" (*Proceedings of the American Philosophical Society* 109:249-58, 1965); Genevieve Miller, "Medical Apprenticeship in the American Colonies" (*Ciba* 8:502-10, 1947), "Medical Education in the Colonies"

(*Journal of Medical Education* 31:82-94, 1956) and "Medical Schools in the Colonies" (*Ciba* 8:522-32, 1947); William F. Norwood, *Medical Education in the United States Before the Civil War* (Philadelphia, University of Pennsylvania Press, 1944); William D. Postell, "Medical Education and Medical Schools in Colonial America" (*International Record of Medicine* 171:364-70, 1958); Richard H. Shryock, *Medicine and Society in America, 1660-1860* (New York, New York University Press, 1960), *Medical Licensing in America, 1650-1965* (Baltimore, Johns Hopkins Press, 1967), and *Medicine in America; Historical Essays* (Baltimore, Johns Hopkins Press, 1966); Frederick C. Waite, "The Degree of Bachelor of Medicine in the American Colonies and in the United States in the Eighteenth Century" (*Annals of Medical History*, n.s., 9:314-20, 1937); James Bordley and A. McGehee Harvey, *Two Centuries of American Medicine, 1776-1976* (Philadelphia, W.B. Saunders, 1976); James T. Goodrich, "The Colonial American Medical Student, 1750-1776" (*Connecticut Medicine* 40:829-44, 1976); Geoffrey Marks and William K. Beatty, *The Story of Medicine in America* (New York, Scribner, 1973); and Royal College of Physicians of London, *Medicine in America, 1680-1820* (London, The College, 1976); and Joseph F. Kett. *The Formation of the American Medical Profession: The Role of Institutions, 1780-1860* (New Haven, Conn., Yale University Press, 1968).

The introduction of modern languages into the curriculum are detailed in such works as: Elijah W. Bagster-Collins, "History of Modern Language Teaching in the United States," in the American and Canadian Committees on Modern Languages, *Studies in Modern Languages* (New York, Macmillan, 1930, pp. 3-96); Carlos E. Castañeda, *Modern Language Instruction in American Colleges, 1779-1800* (Washington, D.C., National Capital Press, 1925); Joseph G. Fucilla, *The Teaching of Italian in the United States: A Documentary History* (New Brunswick, N.J., American Association of Teachers of Italian, 1967); Charles H. Handschin, *The Teaching of Modern Languages in the United States* (Washington, D.C., USGPO, 1913); E.M. Rodrigue, "French Educators in the Northern States during the Eighteenth Century" (*French Review* 14:95-108, 1940); Bruno Rosseli, *Italian Yesterday and Today: A History of Italian Teaching in the United States* (Boston, Stratford, 1935); and Edwin H. Zeydel, "The Teaching of German in the United States from Colonial Times to the Present" (*German Quarterly* 37:315-92, 1964.

Biographies on other academic subjects include: Leander L. Boykin, "Introduction of History into the American College Curriculum" (*The Social Studies* 38:218-21, 1947), which treats the attempts to introduce history into the curriculum of American colleges from colonial times to 1870; Anna Haddow, *Political Science in American Colleges and Universities, 1636-1900* (New York, D. Appleton-Century, 1939); G. Stanley Hall, "On the History of American College Textbooks and Teaching in Logic, Ethics, Psychology, and Allied Subjects" (*Proceedings of the American Antiquarian Society*, new series, 9:137-74, 1893/94); David Potter, *Debating in the Colonial Chartered Colleges: A Historical Survey, 1642 to 1900* (New York, Teachers College, Columbia University, 1944); Charles F. Dunbar, "Economic Science in America, 1776-1876" (*North American Review* 122:124-54, Jan. 1876); Elbert V. Wills, "Political Economy in the Early American College Curriculum" (*South Atlantic Quarterly* 24:131-53, 1925); Warren A. Guthrie, "The Development of Rhetorical Theory in America, 1635-1850" (Ph.D. diss., Northwestern University, 1940); Elmer H. Wilds, "Public Speaking in the Early Colleges and Schools" (*Quarterly Journal of Public Speaking* 2:31-38, 1916); David De Sola Pool, "Hebrew Learning among the Puritans of New England Prior to 1700" (*American Jewish Historical Society Publications* 20:31-83, 1911); Robert H. Pfeiffer, "The Teaching of Hebrew in Colonial America"

(*Jewish Quarterly Review* 45:363-73, 1955); and Alfred C. True, *A History of Agricultural Education in the United States, 1785-1925*, (Washington, D.C., USGPO, 1929), and *A History of Agricultural Experimentation and Research in the United States 1607-1925 Including a History of the United States Department of Agriculture* (Washington, D.C., USGPO, 1937).

Degrees

The system and distribution of degrees in early American colleges are outlined by Walter C. Eells in *Baccalaureate Degrees Conferred by American Colleges in the 17th and 18th Centuries* (Washington, D.C., U.S. Office of Education, 1958), which includes information on the number of degrees, sex of graduates, number of graduates living each year, proportion of graduates in total population, foreign-born graduates, age at graduation, and survival after graduation for the years 1642-1800, and a special study of the college of William and Mary. Other studies include Eells's "Norms for Honorary Degrees in American Colleges and Universities" (*Educational Record* 38:371-81, 1957), which covers the period 1753-1957; and Forest H. Kirkpatrick's "Of Unearned Finds: Honorary Degrees" (*South Atlantic Quarterly* 61:77-85, 1962), which traces the development of the honorary degree in America from colonial times to contemporary time.

Studies dealing with continuing education and the colonial colleges are: Pasquale Anania, "Adult Age and the Education of Adults in Colonial America" (Ph.D., diss. University of California at Berkeley, 1969); Malcolm S. Knowles, *The Adult Education Movement in the United States* (New York, Rinehart and Winston, 1962); Huey B. Long and M.L. Ashford, "Self-Directed Inquiry as a Method of Continuing Education in Colonial America" (*Journal of General Education* 28:245-55, 1976); and Huey B. Long, "Continuing Education: Colleges and Societies" (*Journal of Research and Development in Education* 8:38-52, Summer 1975). Long perceives that continuing education, "as applying to the colonial period, was lifelong education."[3] Continuing education activities for adults during the colonial period were sponsored by colleges but were not part of the college program (e.g., lectures on medicine and medical education, electricity, mechanics, agriculture, etc.).

Faculty

Although there are few specialized studies on the colonial college faculty, the following are basic to any research project: William D. Carrell, "American College Professors, 1750-1800" (*History of Education Quarterly* 8:289-305, 1968), a social analysis of the provincial professoriate; Carl A. Hangartner, "Movements to Change American College Teaching, 1700-1830" (Ph.D. diss., Yale University, 1975); Richard Hofstadter and Walter P. Metzger, *The Development of Academic Freedom in the United States* (New York, Columbia University Press, 1955); Howard H. Peckham, "Collegia Ante Bellum: Attitudes of College Professors and Students Toward the American Revolution" (*Pennsylvania Magazine of History and Biography* 95:50-72, 1971); James D. Casteel, "Professors and Applied Ethics: Higher Education in a Revolutionary Era, 1750-1800" (Ph.D. diss., George Peabody, 1964); and Richard H. Shryock, "The Academic Profession in the United States" (*Bulletin of the American Association of University Professors* 38:32-70, 1952). Examinations and grading systems are studied by Mary Lovett Smallwood in *An Historical Study of Examinations and Grading Systems in Early American Universities; A Critical Study of the Original Records of Harvard, William and Mary, Yale, Mount Holyoke and Michigan from Their Founding to 1900* (Cambridge, Mass., Harvard University Press, 1935).

Student Life

General studies on student life are very few. Among these are the brief studies of: David F. Allmendinger, "New England Students and the Revolution in Higher Education, 1800-1900" (*History of Education Quarterly* 11:381-89, 1971); Harry P. Bowes, "University and College Student Rebellions in Retrospect and Some Sociological Implications" (Ph.D. diss., University of Colorado, 1964, pp. 66-106); Bailey B. Burritt, *Professional Distribution of College and University Graduates* (Washington, D.C., USGPO, 1912); Walter C. Eells; Howard H. Peckham, and David B. Potts, "Students and the Social History of American Higher Education" (*History of Education Quarterly* 15:317-27, 1975); Nancy Burton Bush, "Student and Professor: Colonial Times to Twentieth Century" (*Journal of Higher Education* 40:593-609, 1969); and Harry S. Stout, "University Men in New England, 1620-1660: A Demographic Analysis" (*Journal of Interdisciplinary History* 4:375-400, 1974). Steven J. Novak's *The Rights of Youth: American Colleges and Student Revolt, 1798-1815* (Cambridge, Mass., Harvard University Press, 1977) discusses the fact that:

> the rights of youth emerged amid the ferment of the French Revolution and the Enlightenment, giving youthful protest ideological content, whether merited or not. American student revolt also occured in a postrevolutionary republic passing through great social change. It coincided with the bitter conflict surrounding the election of Thomas Jefferson, when the administration of the federal government passed for the first time to the opposition. This was a formative period in the history of American higher education, as the relatively open, liberal institutions of the late eighteenth century were transformed into the narrower, evangelistic colleges of the early nineteenth century. Student riots and rebellions were both a symptom of this reaction and an inadvertent catalyst of further conservative change. Finally, student revolt took place during the emancipation of childhood described by historians of the American family and adds to our knowledge of the history of adolescence and youth, one of the newest historical fields. In this sense, perhaps the title should be called "the rites of youth."[4]

Joseph F. Kett's *Rites of Passage: Adolescence in America, 1790 to the Present* (New York, Basic Books, 1977) should also be consulted.

Continental Influences on Higher Education

Continental influences on higher education, especially in the late eighteenth century, are best covered in: R. Freeman Butts, "European Models for American Higher Education, 1636-1860" (*Viewpoints* 47:19-43, Sept. 1971); W.H. Cowley, "European Influences on American Higher Education" (*Educational Record* 20:165-90, 1939); Burke A. Hinsdale, "Notes on the History of Foreign Influence upon Education in the United States," in *Report of the Commissioner of Education for the Year 1897-1898* (Washington, D.C., USGPO, 1899, vol. 1, pp. 591-625); Howard M. Jones, *American and French Culture, 1750-1848* (Chapel Hill, University of North Carolina Press, 1927); and Roland G. Paulston, "French Influence in American Institutions of Higher Education" (*History of Education Quarterly* 8:229-45, 1968).

General Library History

The best compilation of American library history sources is Michael H. Harris and Donald G. Davis, Jr.'s *American Library History: A Bibliography* (Austin, University of Texas Press, 1978). It lists a total of 3260 entries under 13 major categories. Of special interest are the following chapters: Historiography and Sources, General Studies of American Library History, Academic Libraries, Special Libraries, and Biographies of Librarians and Library Benefactors. The individual entries are not annotated, but each major division has an introduction, an overview and a commentary on the literature. The coverage is comprehensive, consisting of monographs, periodical articles, doctoral dissertations and master's theses. A total of 364 journal titles were searched, which included not only library periodicals, but also a great many in related fields. The final section on biographies is especially valuable when used in connection with the recently published *Dictionary of American Library Biography* (Littleton, Colo., Libraries Unlimited, 1978), which includes a few colonial and early national period academic librarians. The bibliography is being supplemented by "The Year's Work in American Library History," which is published in the *Journal of Library History*.

Excellent background sources are included in the following works: Harry Bach, *Bibliographical Essay on the History of Scholarly Libraries in the United Staes, 1800 to the Present* (*Occasional Papers*, no. 54, Urbana, University of Illinois Graduate School of Library Science, 1959); Maurine T. Anderson, "History of Colonial American Libraries" (Master's thesis, University of Missouri, 1966); Patricia J. Jacobs, "The Library from Colonial Times to the Present as Revealed in Social and General American Histories" (Master's thesis, Pratt Institute Library School, 1953); and Elizabeth W. Stone, *American Library Development, 1600-1899* (New York, H.W. Wilson, 1977). The Stone work, although a storehouse of information concerning early academic libraries, must be used with caution because of its uncritical use of sources, scattering of data, and undesirable frequency of factual errors.

A list of the 74 librarians which appears in the first 20 volumes of the *Dictionary of American Biography* (New York, Scribner, 1928-37) is contained in Stanley Pargellis's "Long Life to the Library History Round Table," which appeared in the publication edited by John David Marshall, *American Library History Reader* (Hamden, Conn., Shoe String Press, 1961, p. 14, note 3).

Background material on early college library architecture is contained in John J. Boll's "Library Architecture, 1800-1875; A Comparison of Theory and Buildings with Emphasis on New England College Libraries" (Ph.D. diss., University of Illinois, 1961).

Early American College Libraries

Although written in 1934, Louis Shores's *Origins of the American College Library* (Nashville, Tenn., Barnes and Noble, 1934; reprinted Hamden, Conn., Shoe String Press, 1966, and Boston, Gregg Press, 1972) still remains the primary source for information on the 9 colonial college libraries. Through the use of both primary and secondary references, it covers the history of the colonial college library, book collecting and selecting, library benefactors, and the role of the library in colonial higher education. The book's three appendices include a chronological checklist of colonial library donations (1638-1800), notable private libraries received by colonial colleges (John Harvard's gifts to Harvard in 1638, George Berkeley's gifts to Yale in 1733, and Jonathan Belcher's gifts to the College of New Jersey in 1755), and colonial college librarians (1667-1800).

Brief regional surveys are included in: Richard Harwell, "College Libraries" in Allen Kent, et al., eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1971, vol. 5, pp. 269-81); Samuel Eliot Morison, *The Intellectual Life of Colonial New England* (2d ed., New York, New York University Press, 1956); Louis B. Wright, *The Cultural Life of the American Colonies, 1607-1763* (New York, Harper, 1957); and Thomas Goddard Wright, *Literary Culture in Early New England, 1620-1730* (New Haven, Conn., Yale University Press, 1920).

Availability of books and the nature of the book collections of the colonial college libraries are outlined in: Sidney L. Jackson, *Libraries and Librarianship in the West: A Brief History* (New York, McGraw-Hill, 1974,pp. 217-21); Elmer D. Johnson and Michael H. Harris, *History of Libraries in the Western World* (3d ed. rev., Metuchen, N.J., Scarecrow Press, 1976, pp. 189-98); and Michael Kraus, *The Atlantic Civilization: Eighteenth Century Origins* (Ithaca, N.Y., Cornell University Press, 1949, pp. 65-94). However, the major contribution is the doctoral dissertation by Joe W. Kraus. His "The Book Collections of Five Colonial College Libraries: A Subject Analysis" (Ph.D. diss., University of Illinois, 1960) seeks to answer the following questions: (1) what books were available in the colonial colleges? (2) what were the predominant subjects in the book collections? and (3) what use was made of the books? The sources he used are the 10 printed catalogs and 5 published lists of the principal donations of books to Harvard, the College of William and Mary, Yale, the College of New Jersey (Princeton), and the College of Rhode Island (Brown). He also presents a description of the subjects that were taught, the methods of teaching and learning, and the academic preparation of the teachers and students in colonial colleges. A chronological account of the 9 colonial college libraries is provided in Chapter III. Chapters IV and V include the characteristics of the libraries' book collections, which are noted by a statistical table showing the proportion of titles in each subject, and a bibliographical essay in which the more important books are indicated. In Chapter VI, information on the use of books in colonial college libraries was drawn from the regulations governing the use of the libraries, from the library catalogs themselves, from a list of books in use at the time of the Harvard fire of 1764, and from reading lists of President Samuel Johnson of King's College (Columbia), Provost William Smith of the College of Philadelphia, and students of Harvard and the College of Rhode Island. Kraus concludes: "The concept that colonial college libraries were little-used museums of antiquated books of theology is not substantiated by this study....The libraries were well supplied with theological works but not to the exclusion of important works of history, literature, and science, the three additional major subjects in the collections."[5]

Those portions of the above dissertation dealing with the subject analysis of the libraries' catalogs and the bibliographical review of the more important titles in these catalogs are abstracted in Kraus's April 1973 *Library Quarterly* article, "The Book Collections of Early American College Libraries" (43:142-59). Kraus noted in this article that "with the exception of the 1793 Brown catalog, the distribution of subjects [within the other libraries' catalogs] was remarkably similar despite the differences in size and a time span of seventy years. A bibliographical review of the more important titles indicates that the range of subjects was impressive and that the significant authorities were available in many fields."[6]

More specialized studies which analyze catalogs, donation lists, diaries of professors, or general college records of the time include: H. Trevor Colbourn, *The Lamp of Experience: Whig History and the Intellectual Origins of the American Revolution* (Chapel Hill, University of North Carolina Press, 1965), which is a subject analysis and listing of the Whig history works in the published library catalogs of Harvard (1723, 1735, 1773 and 1790), Yale (1743 and 1755), and Rhode Island College (1793); Charles F. Adams, "Milton's Impress on the Provincial Literature of New England" (*Proceedings of the Massachusetts Historical Society* 42:154-70, 1909), which presents certain data on the familiarity of the Massachusetts community with John Milton and his works during the century following the publication of *Paradise Lost* (1667); Leon Howard, "Early American Copies of Milton" (*Huntington Library Bulletin* no. 7, pp. 169-79, 1935), which discusses the existence and significance of copies of Milton's works in America before 1815, and "Wordsworth in America" (*Modern Language Notes* 48:359-65, 1933), which emphasizes the late eighteenth and early nineteenth centuries; Agnes Marie Sibley, *Alexander Pope's Prestige in America, 1725-1835* (New York, King's Crown Press, 1949); George F. Sensabaugh, *Milton in Early America* (Princeton, N.J., Princeton University Press, 1964); Esther C. Dunn, *Shakespeare in America* (New York, Macmillan, 1939); Edwin E. Willoughby, "The Reading of Shakespeare in Colonial America" (*Papers of the Bibliographical Society of America* 31:45-56, 1937); Martin Roth, "Laurence Sterne in America" (*Bulletin of the New York Public Library* 74:428-36, 1970); Robert B. Winans, "Works by and about Samuel Johnson in Eighteenth Century America" (*Papers of the Bibliographical Society of America* 62:537-46, 1968); and David Lundberg and Henry F. May, "The Enlightened Reader in America" (*American Quarterly* 28:262-71 + 22 unnumbered pages of graphs, 1976), which is a brief preliminary report on the authors' attempt to develop statistical information on the reception in eighteenth- and early nineteenth-century America of certain major authors of the European Enlightenment through the analysis of booksellers' auction or sale catalogs, college or other institutional libraries, circulating libraries, library companies or societies, and private libraries.

The colonial era was one of dependence upon England for literary and educational stimulation—the English influence constituted the mainstream in culture—thus, the appreciation of classical and Continental literatures was still significant. The classical tradition is covered by Richard M. Gummere in *The American Colonial Mind and the Classical Tradition: Essays on Comparative Culture* (Cambridge, Mass., Harvard University Press, 1963), which is concerned with the impact of Greek and Roman ideas on the lives and thoughts of the men and women who settled and colonized America during the period 1607-1789.

Continental writers in college libraries are discussed in studies by Lundberg and May (1976); Mary Margaret Harrison Barr, *Voltaire in America, 1744-1800* (Baltimore, Johns Hopkins Press, 1941); Paul M. Spurlin, *Montesquieu in America, 1760-1801* (Baton Rouge, Louisiana State University Press, 1940; reprinted New York, Octagon Books, 1969) and *Rousseau in America, 1760-1809* (University, University of Alabama Press, 1969); Howard Mumford Jones, "Importation of French Books in Philadelphia" (*Modern Philology* 32:157-77, 1934) and "Importation of French Literature in New York City, 1750-1800" (*Studies in Philology* 23:235-51, 1931); Harold S. Jantz, "German Thought and Literature in New England, 1620-1820: A Preliminary Survey" (*Journal of English and German Philology* 41:1-45, 1942); Henry A. Pochmann, *German Culture in America: Philosophical* *and Literary Influences, 1600-1900* (Madison, University of Wisconsin Press, 1957); Stanley T. Williams, *The Spanish Background of American Literature* (2 vols., New Haven, Conn., Yale University Press, 1955); M.F. Heish, "Cervantes in the United States" (*Hispanic Review* 15:409-35, 1947); and Clifford K. Shipton, "Literary Leaven in Provincial New England" (*New England Quarterly* 9:203-17, 1936).

INDIVIDUAL COLLEGES

An early attempt to establish an American college and, associated with it, the first colonial college library, was a failure. In 1617 King James I directed the clergy of England to collect funds for creating a missionary college in Henrico Parish, Virginia. The following year saw the collected money turned over to the Virginia Company "for the endowing of the said university and college with convenient possessions." These "convenient possessions" later included the first books given to an American college library in 1620 and 1621. On March 22, 1623 Indians wiped out the settlement of Henrico and thus set back any attempt to establish the desired college. The Virginia Company renewed its plans for the college but they collapsed in 1624, when the Company's charter was revoked and Virginia became a royal province. Further information can be found in: Harwell (1971); Peter Walne, "The Collections for Henrico College, 1616-1618" (*Virginia Magazine of History and Biography* 80:259-66, 1972); W. Gordon McCabe, "The First University of America, 1619-1622" (*Virginia Magazine of History and Biography* 30:133-56, 1922); and Robert H. Land, "Henrico and Its College" (*William and Mary Quarterly*, 2d series, 18:453-98, 1938).

Lawrence A. Cremin, in *American Education: The Colonial Experience, 1607-1783* (New York, Harper & Row, 1970), observed that "there is also evidence that John Stoughton, a promoter of the Massachusetts Bay Colony who remained in England, had sometime between 1634 and 1636 conceived the idea of 'erecting a place where some may be maintained for learning the language and instructing heathen and our own and breeding up as many of the Indians' children as providence shall bring into our hands.' " Unlike Harvard, founded in 1636, "both ventures placed heavy, though not exclusive, emphasis on educating the Indians and...both were metropolitan attempts to plant colonial institutions."[7]

Harvard University

The real start of American colleges, however, was Harvard College. In October 1636 the Massachusetts General Court appropriated £400 for the establishment of a college. Yet the action of the General Court was not altogether unusual considering the strong Puritan emphasis on learning, as well as the concern for the preservation of their orthodox religious and social beliefs. Harvard owes its name to John Harvard, a minister in Charlestown who left to the college half of his estate and all of his library, which contains some 400 volumes.

Harvard College led a tempestuous existence for a number of years after its founding. Because of a religious controversy involving Anne Hutchinson, classes did not commence until 1638. The college's first president, Nathaniel Eaton, was dismissed for his overly stern discipline. Eaton's successor, Henry Dunster, brought stability and higher scholastic standards to Harvard, but he was forced to resign in a controversy over his religious beliefs.

Dunster's intellectual vigor was not matched by any other president until the last years of the seventeenth century when Increase Mather assumed the office.

It was also not until the last 2 decades of the century that the college obtained enough income from benefactions to keep apermanent teaching force. Most of the college's support came from personal grants, although after 1654 the General Court assumed payment of the president's annual salary. Even so, it is not difficult to understand how such perplexing problems kept the number of students who had enrolled at Harvard by 1700 to less than 600 and the average annual graduating class to 8. Tuition itself was not disproportionately high and the majority of those who did attend the college lived within a relatively short distance at Cambridge. However, general costs and distance from the school did not affect enrollment.

Boys usually entered Harvard from ages 14 to 16. The class rank of enrolling freshmen was usually related to their parent's position in the Puritan social order. Most boys entering Harvard were grammar school graduates, but less than half the graduates of these institutions went on to college in seventeenth-century New England. Those not prepared in the grammar schools were privately tutored, usually by the local minister. Entrance requirements were similar to those of English universities. According to Harvard's first college rules adopted in 1642, a student was admitted after he was "able to read Tully [Cicero], or such like classical author *extempore*, and make and speake true Latine in verse and prose, *Suo (ut Aiunt) Marte* [by his own effort] and decline perfectly the paradigms of nounes and verbs in the Greek tongue."[8]

The Harvard curriculum was also based on the classically oriented patterns of English universities. The undergraduate courses revolved around the traditional *Trivium* and *Quadrivium* but without musical studies, the three philosophies (metaphysics, ethics, and natural science), Greek and Hebrew, and a chronological study of ancient history. As in English universities, logic and rhetoric were the basic subjects in the curriculum. Composition, orations and disputations were given the same careful scrutiny as at English universities, while senior theses invariably carried a religious topic. After graduation students could stay on for further theological studies and a master's degree.

Undergraduates were ruled by a strict disciplinary code. Students were ranked according to scholastic merit, but all were obliged to follow the circumscribed college laws. Among other requirements students were compelled to show punctilious attendance at classes and religious worship; they were restricted in travel outside the university; and they were required to give absolute, unquestioned obedience to faculty members. Fines and whippings were the most common punishment for rule violations, but some students did suffer expulsion during this period.

One of the principal motives behind the founding of Harvard was a concern for ministerial training, but this did not mean that its graduates invariably became pastors. Broader educational goals than those of a mere theological seminary were stated in the charter of 1650, which admonished the college to seek the advancement of "all good Literature, Arts and Sciences." According to data available, only slightly more than 50% of Harvard's seventeenth-century graduates entered the ministry. The remainder followed a multiplicity of occupations including farming, law, medicine, teaching and commerce. Indeed, Harvard College had come to serve as a training ground for the leaders of Puritan society in a manner that far outweighed the small numbers of scholars it enrolled.

During the eighteenth century a steady growth in the number of students added considerably to the tuition income of Harvard. The 2 decades preceding the Revolution saw the number of the student body often surpassing 150, including a few undergraduates from outside New England. Entrance examinations were still oriented toward the classics and were administered to candidates who had been privately tutored or educated in grammar schools. The median age for most undergraduates, however, was about 16, and despite the continued strictness of college discipline, the students were not averse to troublemaking.

The principal trend within New England colleges during this period was manifested in the growth of secularism and the corresponding decline in rigid sectarianism. This liberal predilection first emerged at Harvard during the presidency of John Leverett (1707-24), who had succeeded Rev. Increase Mather. The more lenient atmosphere under Leverett was later broadened during the progressive administration of Rev. Edward Holyoke (1737-69).

This secular spirit was apparent in the broadening curricula of the college. In 1722 Harvard established a professorship of mathematics and natural philosophy—the first in a secular subject. Under its initial holders, John Winthrop IV and Isaac Greenwood, interest in these studies expanded so that by 1760, scientific subjects in the curriculum accounted for at least one-fifth of a student's classroom time. Readings from Newton, Locke and other luminaries of the Enlightenment entered a range of studies, and for a brief period Harvard employed a French instructor.

While the most popular career for graduates remained theology, accounting for approximately 40% of the graduating classes during the final decades of the colonial period, an ever-increasing number were turning toward law, medicine, trade or commerce. Undoubtedly, the rising interest in Enlightenment studies contributed to this worldly outlook, yet at the same time, the new areas of study were also preparing a more aware and broadly educated college graduate. Student disputations, which now included such temporal topics as "Does Civil Government Originate from Compact?" and "Are the People the Sole Judge of Their Rights and Liberties?" were reflections of this growing consciousness among students.

The history of seventeenth-century Harvard is best served by the works of Samuel Eliot Morison: *The Founding of Harvard College* (Cambridge, Mass., Harvard University Press, 1935), *Harvard College in the Seventeenth Century* (2 vols., Cambridge, Mass., Harvard University Press, 1936), and *Three Centuries of Harvard (1636-1936)* (Cambridge, Mass., Harvard University Press, 1946). Other valuable general surveys of early Harvard include the following works: George G. Bush, *History of Higher Education in Massachusetts* (Washington, D.C., USGPO, 1891); Margery S. Foster, *"Out of Small Beginnings...": An Economic History of Harvard College in the Puritan Period, 1636-1712* (Cambridge, Mass., Belknap Press, 1962); Winthrop S. Hudson, "The Morison Myth Concerning the Founding of Harvard College" (*Church History* 8:148-59, 1939); Josiah Quincy, *The History of Harvard University* (2 vols., Cambridge, Mass., J. Owen, 1840); and Edward K. Rand, "Liberal Education in Seventeenth Century Harvard" (*New England Quarterly* 6:525-51, 1933).

Supplementary works of interest include: Robert A. Aubin, comp., *Harvard Heroics, A Collection of Eighteenth-Century Verse Descriptions of Harvard College* (Cambridge, Mass., Harvard University Press, 1934); William Bentinck-Smith, ed., *The Harvard Book:*

Selections from Three Centuries (Cambridge, Mass., Harvard University Press, 1953), which includes writings about Harvard, mainly by Harvard men for the years 1639-1951; Byron R. Bentley, "Colonial Harvard: Its Progressive and Liberal Spirit" (*Harvard Graduates' Magazine* 38:416-24, 1930); Perry W. Brown, "The Sojourn of Harvard in Concord" (*Harvard Graduates' Magazine* 27:497-509, 1919), which covers the period 1775-76; Andrew M. Davis, "John Harvard's Life in America" (*Harvard Graduates' Magazine* 16:457-74, 1908); "The Earliest Description of Harvard" (*Harvard Graduates' Magazine* 12:206-13, 1903); James K. Hosmer, "Harvard in England" (*Harvard Graduates' Magazine* 16:449-57, 1908); Albert Matthews, "Comenius and Harvard College" (*Publications of the Colonial Society of Massachusetts* 21:146-90, 1920); Samuel Eliot Morison, "Harvard in the Colonial Wars, 1675-1748" (*Harvard Graduates Magazine* 26:554-74, 1918); Kenneth B. Murdock, "New Light on John Harvard" (*Publications of the Colonial Society of Massachusetts* 26:229-33, 1927); Henry C. Shelley, *John Harvard and His Times* (Boston, Little, Brown, 1907); Clifford K. Shipton, "The Significance of Early Harvard in American Education" (*New England Social Studies Bulletin* 8:2-5, Dec. 1950); Lewis P. Simpson, "The Intercommunity of the Learned: Boston and Cambridge in 1800" (*New England Quarterly* 23:491-503, 1950), on the proposed removal of Harvard College to Boston; Charles A. Wagner, *Harvard; Four Centuries and Freedoms* (New York, Dutton, 1950); and George H. Williams, "*Translatio Studi*: The Puritans' Conception of Their First University in New England, 1636" (*Archiv für Reformationgeschichte* 57:152-81, 1966), which is a survey of the theological conception of Harvard College in its formative years.

Governance and administrative policies of the institution are covered in: Jeremiah Chaplin, *The Life of Henry Dunster, First President of Harvard College* (Boston, J.R. Osgood, 1872); John M. Hoffmann, "Commonwealth College: The Governance of Harvard in the Puritan Period" (Ph.D. diss., Harvard University, 1972); Samuel Eliot Morison, *Builders of the Bay Colony* (Boston, Houghton Mifflin, 1930) and "The Harvard Presidency" (*New England Quarterly* 31:435-46, 1958); Robert P. Price, "Academic Government at Harvard College, 1636-1723" (Ph.D. diss., University of Michigan, 1969); George P. Costigan, "Henry Dunster, Harvard's First President" (*Harvard Graduates' Magazine* 14:395-401, 1906); Frederick L. Gay, "Remarks on the First Board of Overseers of Harvard College and on Certain Books Written by Members of the Class of 1642" (*Publications of the Colonial Society of Massachusetts* 17:125-31, 1915); W.B. Gerish, "Charles Chauncy, Second President of Harvard" (*Harvard Graduates' Magazine* 16:248-55, 1907); "*Hic admissionem in collegium jure potest expectare:* The Admission Policies of Harvard for 300 Years" (*Harvard Alumni Bulletin* 62:688-91, 1960); Leo M. Kaiser, "*Prae Gaudio, Prae Luctu:* The First Commencement Address of John Leverett [July 7, 1708]" (*Harvard Library Bulletin* 24:381-94, 1976); William C. Lane, "Manuscript Laws of Harvard College" (*Publications of the Colonial Society of Massachusetts* 25:244-53, 1924), which includes a list of various manuscript codes of Harvard College laws which are known to exist; Albert Matthews, "Draught of a Royal Charter for Harvard College, 1723" (*Publications of the Colonial Society of Massachusetts* 25:390-400, 1924), and "The Harvard College Charter of 1762" (*Publications of the Colonial Society of Massachusetts* 21:363-402, 1920); Samuel Eliot Morison, "Harvard Degree Diplomas" (*Harvard Alumni Bulletin* 35:804-13, 1933), and "Nathaniel Eaton, First Head of Harvard College" (*Harvard Graduates' Magazine* 41:127-42, 1933); and John Noble, "Harvard College Lotteries" (*Publications of the Colonial Society of Massachusetts* 27:162-86, 1932), which describes 4 lotteries for the benefit of Harvard College in 1765, 1788, 1794 and 1806.

Religious influences on colonial and revolutionary Harvard are best discussed in the works of: Daniel W. Howe, *The Unitarian Conscience: Harvard Moral Philosophy, 1805-1861* (Cambridge, Mass., Harvard University Press, 1970); David C. Humphery, "Anglican 'Infiltration' of Eighteenth Century Harvard and Yale" (*Historical Magazine of the Protestant Episcopal Church* 43:247-51, 1974); Charles Lyttle, "A Sketch of the Theological Development of Harvard University, 1636-1805" (*Church History* 5:301-29, 1936); Benjamin Rand, "Philosophical Instruction in Harvard University from 1636-1900" (*Harvard Graduates' Magazine* 37:29-47, 188-200, 296-311, 1928/29); and George H. Williams, *The Harvard Divinity School: Its Place in Harvard University and the American Culture* (Cambridge, Mass., Harvard University Press, 1954).

Sources for information concerning Harvard's curricula and instructional programs in the seventeenth and eighteenth centuries include: Frederick E. Brasch, "John Winthrop (1714-1779), America's First Astronomer, and the Science of His Period" (*Publications of the Astronomical Society of the Pacific* 23:153-70, 1916), and "Newton's First Critical Discipline in the American Colonies—John Winthrop," in History of Science Society's *Sir Isaac Newton, 1727-1927: A Bicentenary Evaluation of His Work* (Baltimore, Williams & Wilkins, 1928, pp. 301-38); Thomas F. Harrington, *The Harvard Medical School: A History, Narrative and Documentary, 1782-1905* (3 vols., New York, Lewis, 1905); Albert Matthews, "Teaching of French at Harvard College Before 1750" (*Publications of the Colonial Society of Massachusetts* 17:216-32, 1914); Isidore S. Meyer, "Hebrew at Harvard (1636-1760): A Resume of the Information in Recent Publications" (*American Jewish Historical Society Publications* 35:145-70, 1939); Porter C. Perrin, "Possible Sources of *Technologica* at Early Harvard" (*New England Quarterly* 7:718-24, 1934); Henry A. Pochmann, *German Culture in America; Philosophical and Literary Influences, 1600-1900* (Madison, University of Wisconsin Press, 1957); Keith L. Sprunger, "Technometria: A Prologue to Puritan Theology" (*Journal of the History of Ideas* 29:115-22, 1968); Ronald S. Wilkinson, "John Winthrop, Jr. and the Origins of American Chemistry" (Ph.D. diss., Michigan State University, 1969); Edward J. Young, "Subjects for Master's Degrees in Harvard College from 1655 to 1791" (*Proceedings of the Massachusetts Historical Society* 18:119-51, 1880/81); Gregory P. Baxter, "The Early Days of Chemistry at Harvard" (*Harvard Graduates' Magazine* 33:589-97, 1924); Henry K. Beecher and Mark D. Altschule, *Medicine at Harvard: The First Three Hundred Years* (Hanover, N.H., University Press of New England, 1977); John B. Blake, "Benjamin Waterhouse, Harvard's First Professor of Physic" (*Journal of Medical Education* 33:771-82, 1958); Allen D. Bliss, "Men and Machines in Early Harvard Science" (*Journal of Chemical Education* 17:353-60, 1940); I. Bernard Cohen, "The Beginning of Chemical Instruction in America: A Brief Account of the Teaching of Chemistry at Harvard Prior to 1800" (*Chymia* 3:17-44, 1950); Bernard Faÿ, "La langue francaise à Harvard, 1636-1936," in *Harvard et la France; Reçueil d'etudes, publié en l'hônneur de l'Université Harvard...* (Paris, Modern History Review, 1936, pp. 154-212); Lee M. Friedman, "A Contemporary Appraisal of Judah Monis (1722-1760), Harvard's First Instructor in Hebrew" (*American Jewish Historical Society Publications* 38:146-49, 1948); John F. Fulton, "Science in American Universities, 1636-1946, with Particular Reference to Harvard and Yale" (*Bulletin of the History of Medicine* 20:97-111, 1946); Emilio Goggio, "The History of Modern Language Teaching at Harvard University from its Origin to 1850" (*Harvard Graduates' Magazine* 38:286-91, 1930); Harold C. Ernst, ed., *The Harvard Medical School, 1782-1906* ([Boston], 1906); William A. Jeffries, "What Harvard Taught in 1706-07" (*Harvard Graduates' Magazine* 23:551-53, 1915); Frederick G. Kilgour, "Thomas

Robie (1689-1729): Colonial Scientist and Physician" (*Isis* 30:473-90, 1939); Robert W. Lovett, "Edward Wigglesworth" (*Harvard Library Bulletin* 7:130-34, 1953), on his life in Boston as merchant and a Harvard professor (1758-91); Morris H. Morgan, "The First Harvard Doctors of Medicine" (*Publications of the Colonial Society of Massachusetts* 12:312-33, 1909); Samuel Eliot Morison, "The Harvard School of Astronomy in the Seventeenth Century" (*New England Quarterly* 7:3-24, 1934); Alfred S. Romer, "Zoology at Harvard" (*Bios* 19:7-20, 1948), which covers the period 1784-1948; Gilbert C. Scoggin, "The Elective System at Harvard in the Eighteenth Century" (*Harvard Graduates' Magazine* 28:457-59, 1920); David E. Smith, "A Glimpse at Early Colonial Algebra" (*School and Society* 7:8-11, Jan. 5, 1918), and "An Interesting Document Relating to American Mathematics" (*Scripta Mathematica* 2:221-23, 1934), which is a description of a manuscript that throws light on the subject as taught at the close of the seventeenth century at Harvard; Walter R. Spalding, *Music at Harvard; A Historical Review of Men and Events* (New York, Coward-McCann, 1935); and David P. Wheatland, *The Apparatus of Science at Harvard College, 1765-1800* (Cambridge, Mass., Harvard University Press, 1968)

For descriptions of student life, as well as biographical sketches about Harvard's graduates during this period, one should consult the following titles: Kathryn M. Moore, "Freedom and Constraint in Eighteenth Century Harvard" (*Journal of Higher Education* 47:649-59, 1976), and "The Dilemma of Corporal Punishment at Harvard College" (*History of Education Quarterly* 14:335-46, 1974); Samuel Eliot Morison, "Virginians and Marylanders at Harvard College in the 17th Century" (*William and Mary Quarterly*, 2d series, 13:1-9, 1933); Clifford K. Shipton, *Biographical Sketches of Those Who Attended Harvard College in the Classes 1722-1725* (Boston, Massachusetts Historical Society, 1945); and *Sibley's Harvard Graduates; Biographical Sketches of Those Who Attended Harvard College...with Bibliographical and Other Notes* (17 vols. so far published, Boston, Massachusetts Historical Society, 1873-). A useful addendum to *Sibley's* is Albert Matthews's "Tentative Lists of Temprorary Students at Harvard College, 1639-1800" (*Publications of the Colonial Society of Massachusetts* 17:271-85, 1915).

More specialized works include: Alma M. Bevis, *Diets and Riots: An Interpretation of the History of Harvard University* (Boston, Marshall Jones, 1936); Charles P. Curtis, "Liquor and Learning in Harvard College, 1792-1846" (*New England Quarterly* 25:344-53, 1952); Franklin B. Dexter, "On Some Social Distinctions at Harvard and Yale Before the Revolution" (*Proceedings of the American Antiquarian Society* 9:34-59, 1893); Edward T. Dunn, "Tutor Henry Flynt of Harvard College, 1675-1760" (Ph.D., diss., Rochester University, 1968); "Extracts from the Diary of Timothy Fuller, Jr., An Undergraduate in Harvard College, 1798-1801" (*Cambridge Historical Society Proceedings* 11:33-53, Oct. 1920); *Historical Register of Harvard University, 1636-1936* (Cambridge, Mass., Harvard University, 1937); Steele M. Kennedy, "Emerson's *The American Scholar* [1837] and the Other Harvard Phi Beta Kappa Orations [1782-1955]" (Ph.D. diss., New York University, 1956); Ernest J. Knopton, "Pitt Clarke's Harvard Diary, 1786-1791" (*Harvard Library Bulletin* 21:167-86, 1973); William C. Lane, "The Rebellion of 1766 in Harvard College" (*Publications of the Colonial Society of Massachusetts* 10:33-59, 1907), and "A Religious Society at Harvard College, 1719" (*Publications of the Colonial Society of Massachusetts* 24:309-12, 1923); Thomas W. Leavitt, "Washington Allston at Harvard" (*Harvard Alumni Bulletin* 58:550-53, 1956), on his studies there (1796-1800) and his career as a painter; Albert Matthews, "Harvard Commencement Days, 1642-1916" (*Publications of the Colonial Society of*

Massachusetts 18:309-84, 1916), "Note on 'Placing' at Harvard College" (*Publications of the Colonial Society of Massachusetts* 25:420-27, 1924), and "Remarks on a Society at Harvard College, 1721-1723, an Agreement between Harvard Students, Dated 31 March 1770, and on the Martimercurian Company, 1771" (*Publications of the Colonial Society of Massachusetts* 24:156-65, 1923); Kathryn M. Moore, "The War with the Tutors: Student-Faculty Conflict at Harvard and Yale, 1745-1771" (*History of Education Quarterly* 18:115-27, 1978); Samuel Eliot Morrison, "Precedence at Harvard College in the Seventeenth Century" (*Proceedings of the American Antiquarian Society*, n.s., 42:371-431, 1933), which argues that the order was one of merit rather than of social rank; William L. Sachse, "Harvard Men in England, 1642-1714" (*Publications of the Colonial Society of Massachusetts* 35:119-44, 1951); George S. Stokes, "Samuel Sewall's Catalogue of Harvard Graduates" (*Harvard Library Bulletin* 11:65-70, 1957), which includes a facsimile reproduction of the 1678 manuscript; Ruth H. Sessions, "A Harvard Man's Budget in 1790" (*Harvard Graduates' Magazine* 42:121-47, 1933); and Charles Warren, "Student Politics in Anti-Federalist Days" (*Harvard Graduates' Magazine* 24:485-90, 1916).

For the early history of Harvard College Library, the major surveys to be consulted include those of Charles K. Bolton, "Harvard University Library; A Sketch of Its History and Its Benefactors, with Some Account of Its Influence through Two and a Half Centuries" (*New England Magazine* 15:433-49, 1892); Andrew M. Davis, *An Analysis of the Early Records of Harvard College, 1636-1750* (Cambridge, Mass., Library of Harvard University, 1895); Keyes D. Metcalf, "Spatial Growth in the Harvard Library, 1638-1947" (*Harvard Library Bulletin* 2:98-115, 1948); Samuel Eliot Morison, *The Founding of Harvard College* (1935, pp. 263-70), and *Harvard College in the Seventeenth Century* (1936, vol. 1, pp. 285-97); Alfred C. Potter's "The Harvard College Library, 1723-1735" (*Publications of the Colonial Society of Massachusetts* 25:1-13, 1928), and *The Library of Harvard University; Descriptive and Historical Notes* (4th ed. Cambridge, Mass., Harvard University Press, 1934); Josiah Quincy, *The History of Harvard University* (1840, vol. 2, pp. 485-96); Clarence E. Walton, *The Three-Hundredth Anniversary of the Harvard College Library* (Cambridge, Mass., Harvard College Library, 1939); Edwin E. Williams, "Harvard University Library" in Allen Kent, et al., eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1973, vol. 10, pp. 333-35); Thomas Goddard Wright, *Literary Culture in Early New England, 1620-1730* (1920, pp. 134-36, 180-87, 265-95); Earle E. Coleman, "Copyright Deposit at Harvard" (*Harvard Library Bulletin* 10:135-41, 1956), which covers 1783-90; David Heald, "The Library's Four Homes" (*Harvard Graduates' Magazine* 21:413-19, 1913); Robert W. Lovett, "Pecuniary Mulets and the Harvard Library" (*Harvard Library Bulletin* 3:288-94, 1949), which deals with various library fines from the colonial period to 1949; and Winward Prescott, "Harvard Book-Plates" (*Harvard Graduates' Magazine* 21:58-65, 1912).

Collections of Harvard University documents are also primary sources for its early history. *The Historical Register of Harvard University, 1636-1936* (Cambridge, Mass., Harvard University Press, 1937) contains important dates in Harvard history, chronological tables, and information on officers of government and instruction for the years 1637-1936. Volumes 15, 16, 31, 49 and 50 of the *Publications of the Colonial Society of Massachusetts* contain documents from the Harvard University Archives for the period 1638-1750.

In addition to John Harvard's books, the great majority of whose titles have been identified by Henry J. Cadbury in "John Harvard's Library" (*Publications of the Colonial Society of Massachusetts* 34:353-77, 1943), the next largest acquisition during the seventeenth century was the library of Theophilus Gale (1625-78), who bequeathed a collection that for many years constituted more than half of the entire college library. Other gifts of books followed, including 40 volumes from Gov. John Winthrop in 1642. "The List of Books Presented to the Library of Harvard College by Governor John Winthrop,"appears in volume 2 of Robert C. Winthrop's *Life and Letters of John Winthrop* (2 vols., Boston, Little, Brown, 1869, pp. 438-40). The relationship of the Harvard College Library and the libraries of the Mathers is discussed in Clarence S. Brigham, "Harvard College Library Duplicates, 1682" (*Publications of the Colonial Society of Massachusetts* 18:407-17, 1917); and Henry J. Cadbury, "Harvard College and the Libraries of the Mathers" (*Proceedings of the American Antiquarian Society* 50:20-48, 1940). The late seventeenth-century donations of Englishmen Richard Baxter and Henry Ashurt are described in Clifford B. Clapp's "The Gifts of Richard Baxter and Henry Ashurt to Harvard College" (*Publications of the Colonial Society of Massachusetts* 20:192-99, 1918). Solomon Stoddard's library, donated to Harvard in 1664, is listed by Norman S. Fiering in "Solomon Stoddard's Library at Harvard in 1664" (*Harvard Library Bulletin* 20:255-69, 1972). Julius H. Tuttle discusses the library of Dr. William Ames given to Harvard in 1637 or 1638 in his article, "Library of Dr. William Ames" (*Proceedings of the Colonial Society of Massachusetts* 14:63-66, 1911). Further descriptions of donations are contained in the previously mentioned works of Bolton, Morison, Potter, Quincy, and Walton.

Subject collection surveys include those of philosophical books by Henry J. Cadbury, "Religious Books at Harvard" (*Harvard Library Bulletin* 5:159-80, 1951); scientific titles by Frederick C. Kilgour, "The First Century of Scientific Books in the Harvard College Library" (*Harvard Library Notes* 3:217-25, 1939); and general reference works and textbooks by Robert W. Lovett, "Harvard College and the Supply of Textbooks" (*Harvard Library Bulletin* 4:114-22, 1950), and Arthur O. Norton, "Harvard Textbooks and Reference Books of the Seventeenth Century" (*Publications of the Colonial Society of Massachusetts* 28:361-438, 1935).

From 1640 until 1676 the Harvard College Library was housed in the first building constructed for the college. In 1676 it was moved to the first Harvard Hall, where it remained until the disastrous fire of 1764. For further information, see F. Apthorp Foster, "The Burning of Harvard Hall and Its Consequences" (*Publications of the Colonial Society of Massachusetts* 14:2-43, 1913).

In 1667 the first recorded appointment of a librarian, Samuel Stoddard, took place. In the same year, the first code of "Library Laws" was adopted by the overseers. The code indicated that "books were to be borrowed and returned between 11 a.m. and 1 p.m.; the normal loan period was 1 month, but there was to be 'no lending or removing out of the Library the new Globes or books of extraordinary vallue...but with very great caution & upon extraordinary occasion.' Twice a year, all books were to be 'actually called in & sett in their places,' and at the end of his 2-year term the librarian was required to 'make good' any books that were missing."[9]

The library's first printed catalog, *Catalogus librorum bibliothecae collegeii Harvardini quod est cantabrigiae in Nova Anglia*, listing 3500 volumes, was published in 1723, with supplements in 1725 and 1735. The methodology of compilation, arrangement and format of these catalogs have been described by Jim Ranz in *The Printed Book Catalogue in American Libraries, 1723-1900* (Chicago, American Library Association, 1964, pp. 1, 7, 9-11, 13-14).

Kilgour used these catalogs to ascertain Harvard's scientific holdings during the first century of its existence. Out of 4100 volumes listed in the 1723 catalog and its supplements, approximately 370 volumes were determined to be works of science, or 9% of its total holdings. After describing the titles in these catalogs, Kilgour concluded "that the Library was an important factor in Harvard's progressive scientific knowledge of the first half of the eighteenth century."[10]

Additional analyses of the catalogs' contents are provided by Cadbury, Jackson, Kraus, Morison, Potter and T.G. Wright. They show that in addition to the approximately 2000 religious titles, there were titles in literature and languages, history and geography, science, philosophy, and law and government, in that numerical order.

The slow growth of Harvard's collections continued until 1764 when the library contained fewer than 5000 volumes. In January of that year, all but 404 of the books were lost when Harvard Hall was destroyed by fire. After this tragedy, the Provincial General Court appropriated public funds for construction of a new Harvard Hall, which was ready to house the library in 1766. Donated funds and gifts of books allowed the library to obtain a level of 4350 volumes by 1775. John Hancock himself donated nearly 1300 volumes from his library. Additional information can be obtained by consulting Edwin E. Williams, "Harvard University Library" (1973, vol. 10, p. 334). F. Apthorp Foster uses contemporary descriptions and original documents, including accounts of burned books, in his article, "The Burning of Harvard Hall and Its Consequences" (1913). The architecture and description of the second Harvard Hall library are examined by: Helen B. Allen, "The Old Library: 1764-January 24, 1939" (*Harvard Alumni Quarterly* 61:543-47, 1939); Hamilton V. Bail, "Views of Harvard to 1860: An Iconographic Study" (*Harvard Library Bulletin* 1:11-28, 185-211, 339-71, 1947; 2:44-82, 1948); John P. Brown, "The Second Harvard Hall Library, 1766-1840" (*Harvard Library Notes* 3:226-32, 1939); William C. Lane, "New Hampshire's Part in Restoring the Library and Apparatus of Harvard College After the Fire of 1764" (*Publications of the Colonial Society of Massachusetts* 25:24-33, 1922/24); and Metcalf (1948).

Major individual donations of books during the eighteenth century included those of Bishop Berkeley, Benjamin Franklin and Thomas Hollis (1720-74) of Lincoln's Inn, England. Hollis was also responsible for Harvard's first book fund, which was bequeathed by him in 1774. This £500 was the library's sole purchasing fund for more than a generation. Further information can be found in: Henry J. Cadbury, "Bishop Berkeley's Gifts to the Harvard Library" (*Harvard Library Bulletin* 7:73-87, 196-207, 1953); G.P. Conroy, "Berkeley and Education in America" (*Journal of the History of Ideas* 21:211-21, 1960); Philip Hofer, "The Library's First Book Fund" (*Harvard Library Notes* 3:243-45, 1939); Michael Kraus, *The Atlantic Civilization: Eighteenth Century Origins* (1949, pp. 74-78); William C. Lane, "Harvard College and Franklin" (*Publications of the Colonial Society of Massachusetts* 10:229-39, 1907); Frederick T. Lewis, "The Hollises and Harvard" (*Harvard Graduates' Magazine* 42:107-20, 1933); Caroline Robbins, "Library of Liberty—Assembled for Harvard College Library by Thomas Hollis of Lincoln's Inn" (*Harvard Library Bulletin*

5:5-23, 181-96, 1951); and C.J. Street, "The Hollis Family and Harvard College" (*Harvard Graduates' Magazine* 29:536-40, 1921).

Although a catalog of selected portions of the library was published in 1773 (the so-called undergraduate catalog), a new compilation of the books that had been added to the library since the 1764 fire did not appear until 1790. The best subject and title analysis of this catalog appears in Joe W. Kraus's "The Book Collections of Early American College Libraries" (1973, pp. 151-55).

Revised and expanded "Library Laws" of 1736 were less liberal than those of 1667, for they appear to have reduced hours of circulation from 2 per day to 3 per week—on Fridays only, from 11 a.m. to 2 p.m. New "laws" adopted in 1765 required the librarian to keep the library open and heated only on Wednesdays, and stated that only juniors and seniors could take books from the library. If these rules sound strict, they were an improvement over the earlier ones which allowed only seniors library privileges. An interesting innovation of 1765 was the provision that:

> There shall be a part of the Library kept distinct from the rest as a *smaller Library* for the more Com̄on Use of the College. When there are two or more Setts of Books, the Best shall be deposited in the great Library, & the Others in the great or small library, at the Discretion of the Com̄tee for placeing the Books. This Com̄tee shall also lay apart, & with the Assistance of the Librarian prepare a Catalogue of such Books, as They judge proper for the smaller Library.[11]

As a result, the "undergraduate" catalog mentioned above was published in 1773. Excellent studies of this phenomena have been done by Kraus and Metcalf. Student libraries and reading during this period are treated in: Albert Goodhue, "The Reading of Harvard Students, 1770-1781, as Shown by Records of the Speaking Club" (*Essex Institute Historical Collections* 72:107-29, 1937); Joe W. Kraus, "The Harvard Undergraduate Library of 1773" (*College & Research Libraries* 22:247-52, 1961); Keyes D. Metcalf, "The Undergraduate and the Harvard Library, 1765-1877" (*Harvard Library Bulletin* 1:29-51, 1947); and Robert F. Seybolt, "Student Libraries at Harvard, 1763-1764" (*Publications of the Colonial Society of Massachusetts* 28:449-61, 1935).

Soon after the revolutionary war broke out, the Harvard buildings served as barracks for the Continental army and the college moved to Concord for a few months during 1775-76 to avoid the hazards of war. This period is treated in William C. Lane, "The Sojourn of the Harvard Library in Concord, Massachusetts, 1775-1776" in William W. Bishop and Andrew Keogh, eds., *Essays Offered to Herbert Putnam by His Colleagues and Friends on His Thirtieth Anniversary as Librarian of Congress, 5 April 1929* (New Haven, Conn., Yale University Press, 1929, pp. 275-87)

The College of William and Mary

The College of William and Mary, the second oldest institution of higher learning in the United States, was established by James Blair for the training of an Episcopal clergy in Williamsburg, Virginia, under a charter granted in 1693 by King William and Queen Mary. The Wren building, erected in 1695 for classes and dormitories, was rebuilt after a fire in

1705. An Indian school was supported by a part of the income from a fund bequeathed for philanthropic purposes by the distinguished physicist, Hon. Robert Boyle. Until 1712 only William and Mary's grammar school operated. But in this year, college-level instruction finally began, and by 1729 the full 6 professorships called for in the charter were filled and serious teaching began.

Many educational aspects of William and Mary College were similar to those of Harvard and Yale. Like its New England counterparts, William and Mary was a sectarian institution (Anglican) which had a primary purpose of supplying churches with an orthodox ministry. It also required a classical grounding in Latin and Greek for admission and instituted strict rules for moral and religious conduct by its students. However, like Harvard and Yale, William and Mary also prepared prospective lawyers and physicians as well as ministers for colonial service. The Virginia Assembly, recognizing the importance of William and Mary to the colony, made substantial land and money grants to the college and also gave it income from duties on skins, furs and exported tobacco. Also, following an English parliamentary practice, the college was allowed to send a representative to Virginia's legislative assembly.

The administration of William and Mary contained a few features that differed from other colonial colleges. Under its original charter of 1693, the management of college affairs was left to dual governing bodies, one being the "faculty," and the other a board of nonresident "visitors." Initially, the faculty was expected to manage business affairs and the visitors were to appoint faculty members and make the college rules or statutes. Eventually, faculty representatives at William and Mary were able to achieve a greater degree of autonomy than those at other colonial colleges, largely through a limited right of appeal to England. By the outbreak of the American Revolution, however, the Board of Visitors still held principal control over the college.

During the eighteenth century, the curriculum at William and Mary experienced significant changes. Originally, the course of study was geared to meet the needs of the college's 3 departments: the grammar school, the school of philosophy and the school of sacred theology. As such, the early curriculum was classically oriented and quite similar to that of Harvard College. By the early 1700s, however, President Blair began to break with traditional studies. In 1717 Rev. Hugh Jones was appointed to the college's chair of mathematics. When the college reached its full complement of 6 professors in 1729, it broadened its curriculum even further. New courses in mathematics, science, law and philosophy were introduced, and in 1779 the William and Mary curriculum was reorganized into what was probably the most advanced liberal arts curriculum in the United States. After the revolutionary war, medicine and law were an established part of the total college curriculum. In 1776 the Phi Beta Kappa Society was organized by a group of students.

Many of William and Mary's alumni were leaders in the American Revolution, including Thomas Jefferson, James Monroe, Richard Bland, Peyton Randolf, Edmund Randolf and Benjamin Harrison. The college's buildings were damaged by the revolutionary troops and the English endowment was seriously impaired as a result of the war.

The major histories of William and Mary during the colonial and early national periods are those by: Herbert B. Adams, *The College of William and Mary: A Contribution to the History of Higher Education with Suggestions for Its National Promotion* (Washington, D.C., USGPO, 1887); Philip A. Bruce, *Institutional History of Virginia in the Seventeenth Century: An Inquiry into the Religious, Moral, Educational, Legal, Military, and Political Condition of the People Based on Original and Contemporaneous Records* (2 vols., New York, Putnam, 1910); Herbert L. Ganter, "Documents Relating to the Early History of the College of William and Mary and to the History of the Church in Virginia" (*William and Mary Quarterly*, 2d series, 19:348-75, 446-70, 1939; 20:114-37, 212-36, 391-96, 524-44, 1940); J.E. Kirkpatrick, "Constitutional Development of the College of William and Mary" (*William and Mary Quarterly*, 2d series, 6:95-108, 1926); Daniel Esten Motley, "Life of Commissary James Blair, Founder of William and Mary College" (*John Hopkins Studies in Historical and Political Science*, series 19, no. 10, 1901); Governor Nicholson, "Papers Relating to the Administration of and to the Founding of William and Mary College" (*Virginia Magazine of History and Biography* 7:153-72, 275-86, 386-401, 1899/1900; 8:46-64, 126-46, 366-85, 1900/01; 9:18-29, 156-62, 251-62, 1901/02); Robert P. Thompson, "The Reform of the College of William and Mary, 1763-1780" (*Proceedings of the American Philosophical Society* 115:187-213, 1971); Lyon G. Tyler, "Education in Colonial Virginia, Parts 4 and 5" (*William and Mary Quarterly*, 1st series, 6:171-87, 1897/98; 7:1-9, 1898/99), and "William and Mary College and Its Influence on the Founding of the Republic" (*William and Mary Quarterly*, 2d series, 15:324-33, 1935); and Henry Hartwell, James Blair and Edward Chilton, *The Present State of Virginia, and the College*, edited by Hunter D. Farish (Williamsburg, Va., Colonial Williamsburg, 1940), which was originally written in 1697.

Special administrative, financial and governance studies include those of James Blair and Stephen Fouace, "The Statutes of the College of William and Mary in Virginia" (*William and Mary Quarterly*, 1st series, 16:239-56, 1908; 22:281-96, 1914), covering 1758 and 1776; J.E. Kirkpatrick (1926); Motley (1901); Nicholson (1899/1900, 1900/01, 1901/02); Thompson (1971); and Tyler's "Early Presidents of William and Mary" (*William and Mary Quarterly*, 1st series, 1:633-75, 1892). In addition, the *William and Mary Quarterly* has reproduced many documents which are vital to an understanding of the whole spectrum of the institution's early history and development. See, for example: "Finances of the College in 1755-1765" (1st series, 11:174-79, 1902/03); "Papers Relating to the College of William and Mary" (1st series, 16:162-80, 1907/08); and "Recently Discovered Documents of William and Mary College (2d series, 10:239-53, 1930). The college also published a *History of the College of William and Mary, from Its Foundation, 1660-1874* (Richmond, Va., J.W. Randolf and English, 1874). Revolution and post-Revolution documents are contained in "Correspondence of Ezra Stiles, President of Yale College, and James Madison, President of William and Mary College, 1780" (*William and Mary Quarterly*, 2d series, 7:292-96, 1927), and "Journal of the President and Masters or Professors of William and Mary College, 1777-1784" (*William and Mary Quarterly*, 1st series, 14:242-46, 1906; 15:1-14, 134-42, 1906; 15:164-74, 264-69, 1907; 16:73-80, 1907).

English and Scottish universities' influence on the development of William and Mary's curriculum and instruction is studied by Courtlandt Canby, "A Note on the Influence of Oxford University upon William and Mary College in the 18th Century" (*William and Mary Quarterly*, 2d series, 21:243-47, 1941); A. Bailey Cutts, "Educational Influence of Aberdeen in 17th Century Virginia" (*William and Mary Quarterly*, 2d series, 15:229-47, 1935); and Glen Patton, "The College of William and Mary, Williamsburg, and the Enlightenment" (*Journal of the Society of Architectural Historians* 29:24-32, March 1970).

The works of Dice R. Anderson, "Teacher [George Wythe] of Jefferson and Marshall" (*South Atlantic Quarterly* 15:327-43, 1916); William E. Hemphill, "George Wythe, the Colonial Briton" (Ph.D. diss., University of Virginia, 1937); Galen W. Ewing, "Early Teaching of Science at the College of William and Mary" (*Journal of Chemical Education* 15:3-13, 1938); Herbert L. Ganter, "William Small, Jefferson's Beloved Teacher" (*William and Mary Quarterly*, 3d series, 4:505-11, 1947); P.W. Hiden, "Education and the Classics in the Life of Colonial Virginia" (*Virginia Magazine of History and Biography* 49:20-28, 1941); Robert M. Hughes, "William and Mary, the First American Law School" (*William and Mary Quarterly*, 2d series, 2:40-48, 1922); and Lyon G. Tyler, "Early Courses and Professors at William and Mary College" (*William and Mary Quarterly*, 1st series, 14:71-83, 1905), and "The First Chair of Law and Police" (*William and Mary Quarterly*, 1st series, 4:264-65, 1896), as well as a compilation of correspondence, "Charles Bellini, First Professor of Modern Languages in an American College" (*William and Mary Quarterly*, 2d series, 5:1-29, 1925) should be consulted for knowledge of early curriculum and instructional programs. Of further interest are: Fred B. Devitt, "William and Mary: America's First Law School" (*William and Mary Law Review* 2:424-36, 1960); Martha W. Hiden, "Latin in Colonial Virginia" (*Classical Weekly* 22:41-45, Nov. 1928); and Oscar L. Shewmake, *The Honorable George Wythe [1726-1806], Teacher, Lawyer, Jurist, Statesman* (n.p., 1950), which includes details on his teaching of law at William and Mary from 1779 to 1789.

Thomas Jeffeerson's view on higher education and his influence on curriculum and governance reforms at William and Mary are outlined in studies by: John Carey, "Influences on Thomas Jefferson's Theory and Practice of Higher Education" (Ph.D. diss., University of Michigan, 1969); James B. Conant, *Thomas Jefferson and the Development of American Public Education* (Berkeley, University of California Press, 1962); John Densford, "The Educational Philosophy of Thomas Jefferson" (Ph.D. diss., Oklahoma State University, 1961); Roy J. Honeywell, *The Educational Work of Thomas Jefferson* (Cambridge, Mass., Harvard University Press, 1931); and Gordon C. Lee, ed., *Crusade Against Ignorance: Thomas Jefferson on Education* (New York, Teachers College Press, 1961).

Information on students and student life are contained in letters and documents reproduced in the following *William and Mary Quarterly* studies: "Notes Relative to Some of the Students Who Attended the College of William and Mary, 1753-1770" (2d series, 1:27-41, 1921) and "Notes Relative to Some Students of William and Mary, 1770-1778" (2d series, 1:116-30, 1921). Letters from Joseph S. Watson, a student of William and Mary (1798-1801) have been reproduced in the *Virginia Magazine of History and Biography* (29:129-79, 1921; 30:223-49, 1922). Another basic reference, *The Provincial List of Alumni, Grammar School Students, Members of the Faculty, and Members of the Board of Visitors of the College of William and Mary* was published in 1941 under the sponsorship of the college.

About 200 books were gathered for the use of the college before 1700, but most of those were destroyed by the fire of 1705. The best study of the colonial period is John M. Jennings's *The Library of the College of William and Mary in Virginia, 1693-1793* (Charlottesville, University Press of Virginia, 1968). In spite of major handicaps due to the destruction of early records and book collection catalogs, Jennings has provided us with an excellent history. His work is divided into 5 chapters: "The Founding of the College, 1617-1693"; "The First Book Collection, 1693-1705"; "Rebuilding the Book Collection, 1705-1743"; "Expanding the Book Collection"; and "A Good Foundation to Improve Upon." In these chapters, Jennings discusses the physical arrangement of the library, the nature of the collection, selection policy, names of donors and contents of their donations, governance, and level of financial support for the library. By 1781 the library contained 3000 volumes and was the second largest college in the nation, surpassed only by Harvard. Younger faculty members usually "kept" the library open a few hours per week, and for some years only clerks were in attendance. No books circulated, and apparently only the faculty used the college library to any extent, while students generally relied on their texts and lecture notes. In an earlier work, Jennings includes a catalog of books which Colonel Francis Nicholson gave to the college in 1695, and describes the collections of Gov. Alexander Spotswood and Rev. Blair, who willed their libraries to William and Mary in 1740 and 1743, respectively. See "Notes on the Original Library of the College of William and Mary in Virginia, 1693-1705" (*Papers of the Bibliographical Society of America* 41:239-67, 1947). Joe W. Kraus in his doctoral disseration (1960) analyzes the subject content of the Nicholson gift. Kraus also notes that a gift of about 200 volumes from King Louis XVI was received in 1784. Only 2 volumes from the impressive collection of l'Imprimerie Royale publications have survived and no contemporary list is extant.

Yale University

" 'I give these books for the founding of a college in this colony' were the words with which each of ten ministers presented the [forty-volume] nucleus of Yale's library in a meeting at Branford, Connecticutt, in 1700."[12] In October of the same year, the fledgling college was granted a charter by the colony of Connecticut.

It opened at Saybrook but its classes were held for the most part at Killingworth and Milford, until the institution was permanently transferred to New Haven in 1716, where citizens had outstripped other communities in subscribing sums toward a building. It was renamed Yale College in 1718 to honor the gifts of Elihu Yale (1649-1721), a Boston-born merchant and a former governor of Madras in British India. By a second charter (1745), the college was incorporated. Its first professorship (1755) was a chair in divinity. By 1771 it had established faculties in mathematics, astronomy and physics.

Unlike Harvard, Yale established a governance model with a head of the college and a single self-perpetuating board of nonresident trustees. Until the revolutionary war, all of these trustees were clergymen. Almost all of the colonial colleges followed the model of Yale, rather than Harvard's governance by a corporation and overseers.

The standard histories of Yale during the colonial and early republic periods are those of Franklin B. Dexter, *Documentary History of Yale University, Under the Original Charter of the Collegiate School of Connecticutt, 1701-1745* (New Haven, Conn., Yale University Press, 1916), which includes letters, proceedings of trustees' meetings, legislative documents, and source materials on the early history of Yale; Reuben A. Holden, *Yale : A Pictorial History* (New Haven, Conn., Yale University Press, 1967); Brooks M. Kelley, *Yale: A History* (New Haven, Conn., Yale University Press, 1974); Edwin Oviatt, *The Beginnings of Yale (1701-1726)* (New Haven, Conn., Yale University Press, 1916); and Richard Warch, *School of the Prophets: Yale College, 1701-1740* (New Haven, Conn., Yale University Press, 1974).

Religious influence on the governance, educational philosophy and instructional programs at Yale are best described by the works of Roland H. Bainton, *Yale and the Ministry: A History of Education for the Christian Ministry at Yale from the Founding in 1701* (New York, Harper, 1957); Ross W. Beales, "God and Man at Yale, 1742" (*Bulletin of the Connecticut Historical Society* 41:29-32, 1976); Ralph H. Gabriel, *Religion and Learning at Yale; The Church of Christ in the College and University, 1757-1957* (New Haven, Conn., Yale University Press, 1958); Stephen Nissenbaum, *The Great Awakening at Yale College* (Belmont, Calif., Wadsworth, 1972), a compilation of a group of 50 letters, diaries, memoirs, reports, resolutions, laws and other sources revealing the impact of George Whitefield's religious revival on Yale faculty and students during 1740-45; Egbert C. Smyth, "The 'New Philosophy' Against Which Students at Yale College Were Warned in 1714" (*Proceedings of the American Antiquarian Society*, new series, 11:251-52, Oct. 1896), which concerns the new philosophy of Descartes and Newton; Louis Tucker, "The Church of England and Religious Liberty at Pre-Revolutionary Yale" (*William and Mary Quarterly*, 3d series, 17:314-28, 1960); Robert E. Daggy, "Education, Church, and State: Timothy Cutler and the Yale Apostasy of 1722" (*Journal of Church and State* 13:43-68, 1971); Donald F. Gerardi, "Samuel Johnson and the Yale 'Apostasy' of 1722: The Challenge of Anglican Sacramentalism to the New England Way" (*Historical Magazine of the Protestant Episcopal Church* 47:153-75, 1978); Carter S. Haver, "The Reaction of Yale to the Great Awakening, 1740-1766" (Ph.D. diss., University of Texas at Austin, 1977); and James B. Reynolds, ed., *Three Centuries of Christian Activity at Yale* (New York, Putnam, 1901).

For bibliographical information concerning the 2 most important and influential presidents of Yale during this period, Ezra Stiles (1777-95) and Thomas Clap (1739/40-66), the following works should be consulted: Arthur A. Chiel, "Ezra Stiles—The Education of an 'Hebrician' " (*American Jewish Historical Quarterly* 60:235-41, 1971), and "The Rabbis and Ezra Stiles" (*American Jewish Historical Quarterly* 61:294-312, 1972), which show Stiles was eager to deepen his Hebrew knowledge, and especially to learn more about Jewish mystical literature; "Correspondence of Ezra Stiles, President of Yale College, and James Madison, President of William and Mary" (*William and Mary Quarterly*, 2d series, 7:292-96, 1927); Percy C. Eggleston, "Yale and Her President, 1777-1795" (*New England Magazine* 40:137-47, 1909); George F. Moore, "Ezra Stiles Studies in the Cabala" (*Proceedings of the Massachusetts Historical Society* 51:290-306, 1918); Edmund S. Morgan, "Ezra Stiles: The Education of a Yale Man, 1742-1746" (*Huntington Library Quarterly* 17:251-68, 1954), and *The Gentle Puritan: A Life of Ezra Stiles, 1727-1795* (New Haven, Conn., Yale University Press, 1962); Francis Parsons, "Ezra Stiles of Yale" (*New England Quarterly* 9:286-316, 1936); and Louis Tucker, "President Thomas Clap and the Rise of Yale College, 1740-1766" (*Historian* 19:66-81, 1956), "President Thomas Clap, Architect of Yale Institutions" (*Yale University Library Gazette* 33:91-101, 1959), and *Puritan Protagonist: President Thomas Clap of Yale College* (Chapel Hill, University of North Carolina Press, 1962). Also, Franklin B. Dexter, ed., *The Literary Diary of Ezra Stiles* (3 vols., New York, Scribner, 1901); and Stiles's correspondence, including Isabel M. Calder, ed., *Letters and Papers of Ezra Stiles, President of Yale College, 1777-1795, Presented to Yale University Library by Mrs. Edward S. Harkness* (New Haven, Conn., Yale University Library, 1933) are still useful. Some of Clap's writings are reproduced in Franklin B. Dexter's "Thomas Clap and His Writings" (*Papers of the New Haven Colony Historical Society* 5:247-74, 1894).

Other administrative studies of interest include: Sheldon S. Cohen, "The Parnassus Articles" (*History of Education Quarterly* 5:174-86, 1965), which discusses a series of articles under the pen name Parnassus that appeared in the *Connecticut Courant* early in 1783, attacking the government of Yale College as outmoded, aristocratic and sectarian, and asking for the addition of secular officers, particularly state legislators, to the Yale Corporation (the author believes the anonymous Parnassus was Timothy Dwight, who became Yale's president in 1795); Alexander Cowie, *Educational Problems at Yale College in the Eighteenth Century* (Connecticut Tercentenary Pamphlet No. 55, New Haven, Conn., Yale University Press, 1936), which is a discussion of some of the problems confronting the college at this time; Charles E. Cuningham, *Timothy Dwight, 1752-1817: A Biography* (New York, Macmillan, 1942); Macgrane Coxe, "Chancellor Kent at Yale, 1777-1781" (*Yale Law Journal* 17:311-37, 1908); Franklin B. Dexter, "An Historical Sketch of the Powers and Duties of the Presidency in Yale College" (*Proceedings of the American Antiquarian Society* 12:27-42, 1896), "The Removal of Yale College to New Haven in October 1716" (*Papers of the New Haven Colony Historical Society* 9:70-89, 1918), and "Yale College in Saybrook" (*Papers of the New Haven Colony Historical Society* 7:129-40, 1908); Reuben A. Holden, *Profiles and Portraits of Yale University Presidents* (Freeport, Maine, Bond-Wheelwright, 1968); Samuel Johnson, *Some Historical Remarks Concerning the Collegiate School of Connecticut in New Haven, Now Yale College, Written in Part, Nov. 20, 1717* (New Haven, Conn., Yale University, 1933); Bernhard Knollenberg, "Benjamin Franklin and Yale" (*Yale University Library Gazette* 26:22-27, July 1951); Harold A. Larrabee, "150 Years of Smearing the Infidel" (*Humanist* 10:191-97, 1950), which mainly discusses the struggles of President Timothy Dwight at Yale against "infidel philosophy" during the period 1795-1815; Kenneth B. Murdock, "Cotton Mather and the Rectorship of Yale College" (*Publications of the Colonial Society of Massachusetts* 26:388-401, 1926); Francis Parsons, "Elisha Williams, Minister, Soldier, President of Yale" (*Papers of the New Haven Colony Historical Society* 7:188-214, 1908); Abe C. Ravitz, "Timothy Dwight: Professor of Rhetoric" (*New England Quarterly* 29:63-72, 1956); Charles H. Smith, "Early Struggles in American Education: Difficulties Encountered by the Settlers in Establishing A Desirable College System—Yale and Early Troubles with the Legislature" (*Connecticut Magazine* 8:179-92, 1903); and *The 250th Anniversary of Yale University: Speeches and Documents of the Year of Celebration, 1951-1952* (New Haven, Conn., Yale University Press, 1952).

Curriculum and instructional programs are covered in specialized studies and by the following authors: Cowie (1936); Louis W. McKeehan, *Yale Science: The First Hundred Years, 1701-1801* (New York, H. Schuman, 1947); Nissenbaum (1972); Harold Rhodes, "Educational Factors Affecting Requirements of Yale College" (Ph.D. diss., Yale University, 1940); John C. Schwag, "The Yale College Curriculum, 1701-1901" (*Educational Review* 22:1-17, June 1901); Louis Tucker, "President Thomas Clap of Yale College" (*Isis* 52:55-77, 1961), having an emphasis on science and mathematics instruction; Philip E. Browning, "Benjamin Silliman (1779-1864) and the Beginnings of Chemistry at Yale" (*Journal of Chemical Education* 11:170-74, 1934); John P. Nolan, "Genteel Attitudes in the Formation of the American Scientific Career of Benjamin Silliman of Yale" (Ph.D. diss., Columbia University, 1978); and Joseph V. Totaro, "Curriculum Change in Higher Education: A Case Study of Modern Language Teaching at Nineteenth Century Yale" (Ph.D. diss., Syracuse University, 1957), which discusses the status of modern languages in the Yale curriculum during 1701-1899, with special reference to the eventual introduction of the elective system.

William B. Bailey, "A Statistical Study of Yale Graduates, 1701-1792" (*Yale Review* 16:400-26, 1908); Franklin B. Dexter, *Biographical Sketches of the Graduates of Yale College, with Annals of the College History, Oct. 1701-June 1792* (4 vols., New York, Henry Holt, 1885-1907), "Student Life at Yale, 1795-1817" (*Proceedings of the American Antiquarian Society*, new series, 27:318-35, 1917), and "Student Life at Yale in the Early Days of Connecticut Hall" (*Papers of the New Haven Colony Historical Society* 8:288-97, 1908); John C. Smith, "Diary of John Colton Smith While a Student at Yale, 1782-1783" (*Connecticut Historical Society Bulletin* 19:26-28, 1954); Anson Stokes, *Memorials of Eminent Yale Men: A Biographical Study of Student Life and University Influences in the Eighteenth and Nineteenth Centuries* (2 vols., New Haven, Conn., Yale University Press, 1914); Herbert Thoms, *Doctors of Yale College, 1702-1815 and the Founding of the Medical Institution* (Hamden, Conn., Shoe String Press, 1960); *Yale University Portrait Index, 1701-1951* (New Haven, Yale University Press, 1951); Thomas Day and James Murdock, *Brief Memoirs of the Class of 1797* (New Haven, Conn., printed by B.L. Hamlen, 1848); and Lottie G. Bishop, ed., *Historical Register of Yale University, 1701-1937* (New Haven, Conn., Yale University Press, 1939), are important not only for biographical information concerning Yale's early graduates, but for facts concerning early Yale student life and activities as well.

Several studies on early book donations to Yale, including that of the Elihu Yale gift of an estimated 417 books (valued at £100), have been published. Dexter (1916) and Oviatt (1916) devote several sections to this early history. Oviatt's 2 chapters are entitled "The Gifts of Books" (pp. 289-303), and "The Result of the Books" (pp. 396-412). Daniel Coit Gilman in "The Library of Yale College" (*University Quarterly* 2:244-61, 1860) reproduces the list of "Books with which College was Founded in 1701," from the earliest attempt to identify them, i.e., that of Ezra Stiles in 1784. A brief history and a catalog describing Elihu Yale's gift is contained in Donald Wing and Margaret L. Johnson's "The Books Given by Elihu Yale in 1718" (*Yale University Library Gazette* 13:46-67, 1938). The authors identify bibliographically the brief titles of the original catalog.

Lists of books given by Jeremiah Dummer (1714) are reproduced and analyzed in studies by Louise May Bryant and Mary Patterson, "The List of Books Sent by Jeremiah Dummer" (*Papers in Honor of Andrew Keogh, Librarian of Yale University, by the Staff of the Library, 30 June 1938* (New Haven, Conn., private printing, 1938, pp. 42-92), and Ann S. Pratt, "The Books Sent from England by Jeremiah Dummer to Yale College" (*Papers in Honor of Andrew Keogh...*, pp. 7-44). Dummer "was the colonial agent residing in London for the province of Massachusetts from 1710 to 1721, and from 1712 to 1730 for the colony of Connecticut. Although a Harvard graduate, Dummer worked diligently to collect books from authors and persons of wealth in England for the School, and even tried unsuccessfully to get Thomas Hollis to transfer his interest from Harvard to Yale." A total of "more than 700 volumes have been preserved in contemporary records, along with the names of about 180 donors."[13]

The Bryant and Patterson study carries a "List of Books Given to the College of Connecticut in New England with the Names of the Benefactors," dated "London 15 Jan'ry 1712/13." Further descriptions of these early collections and their donors are also included in Thomas Goddard Wright's *Literary Culture in Early New England* (1920, pp. 184-87).

The next two decades saw a further growth in Yale's library through the usual process of gifts. John E. Lane provides a list in "Daniel Turner and the First Degree of Doctor of

Medicine Conferred in the English Colonies of North America" (*Annals of Medical History* 2:367-80, 1919), of Turner's books given to Yale in 1723. Pratt studies the documents relating to the gifts of Isaac Watts (1674-1748) to Yale College in 1730-38, and of the books themselves. Bishop Berkeley's famous gift of nearly 1000 volumes to Yale in 1733 has been listed in the studies by Daniel C. Gilman, "Bishop Berkeley's Gifts to Yale College" (*New Haven Colony Historical Society Papers* 1:146-70, 1865); and Andrew Keogh, "Bishop Berkeley's Gift of Books to Yale in 1733" (*Yale University Library Gazette* 8:1-26, July 1933). Basing his work upon invoices and the Yale library catalog published in 1743, Keogh has reconstructed to the best of his ability the Berkeley gift. Subject analyses of the contents of the library are included in Thomas E. Keys, "The Colonial Library and the Development of Sectional Differences in the American Colonies" (*Library Quarterly* 8:376, 1938); and Joe W. Kraus, "The Book Collections of Five Colonial College Libraries" (1960), which also covers the collections of Jeremiah Dummer and Elihu Yale. Other contributions that should be consulted include: Henry M. Fuller, "Bishop Berkeley as a Benefactor of Yale" (*Yale University Library Gazette* 28:1-8, 1953), and Arthur A. Luce, *The Life of George Berkeley, Bishop of Cloyne* (London, Nelson, 1949, pp. 94-152), which includes information on the Bishop's benefactions to Harvard and Yale.

An interesting study on the history of Yale collection bookplates was provided by G.M. Troxell in "Bookplates of the Yale Libraries, 1780-1846," in *Papers in Honor of Andrew Keogh...* (1938).

A catalog of 2600 volumes (representing 1178 titles) was, as already mentioned, published in 1743. This catalog was compiled under the close supervision of Rector Thomas Clap, who had the titles carefully arranged " 'under proper *Heads* that so you may Readily know and find any Book, upon any particular Subject.' The classification was in fact Clap's outline for the proper acquisition of knowledge, and was apparently adopted from the list of books published in *Introduction to Philosophy* by Samuel Johnson, president of King's College [Columbia]."[14] The methods of arrangement, bibliographical decription and entries, and physical appearance are covered by Ranz (1964, pp. 8-11). A subject and partial title analysis of this catalog, along with those of 1755 and 1791, is included in Kraus (1973, pp. 147-49, 155).

An interesting sidelight to the history of this catalog was the establishment in the Sterling Memorial Library of a reproduction of the 1742 college library, with the actual books placed on the shelves in the order shown in the 1743 catalog. Anne S. Pratt and Andrew Keogh's article, "The Yale Library of 1742" (*Yale University Library Gazette* 15:29-40, 1940), described this library and provided a historical presentation of the original Yale library up to 1742, including names of early donors and caretakers of the library, description of the physical facilities and rules for its use, and the preparation of the 1743 catalog. A list of 31 American imprints in the Yale College library of 1742 and the names of their donors is provided by Margaret L. Johnson, "American Imprints and Their Donors in the Yale College Library of 1742" in *Papers in Honor of Andrew Keogh...* (1938, pp. 355-71).

By the time the 1791 catalog was published, Yale contained nearly 4000 volumes. More than half the collection was theological in nature. History, science, literature, philosophy, geography and law were the next largest groups, in that order.[15] A listing of the medical books in the 1743, 1755, 1791 and 1808 catalogs is provided by Frederick G. Kilgour, "The First Century of Medical Books in the Yale College Library" (*Yale University Library Gazette* 35:101-05, 1961).

Kraus's "The Book Collections of Five Colonial College Libraries" is an excellent source for the administrative and organizational history of the early Yale library (1960, pp. 82-83, 85-87).

The role of the books in Yale's library in diffusing new ideas, dissent and heresy in eighteenth-century America is described in Edmund S. Morgan, "The Trouble with Books" (*Michigan Alumnus Quarterly Review* 65:185-96, 1959); and Edward P. Morris, "A Library of 1742" (*Yale University Library Gazette* 9:1-11, July 1934).

Princeton University

Founded in 1746 as the College of New Jersey, Princeton was the fourth college established in the British colonies. It was inspired by the Great Awakening, and 6 of the 7 original trustees were leaders in the New Light faction of the Presbyterian church. Although founded primarily to produce ministers for the Presbyterian church, the college "admitted young men of any religious denomination and gave them background for entering other learned professions as well as the ministry."[16]

The first president was Rev. Jonathan Dickinson; the first classes were held at his home in New Brunswick. Upon his death in October 1747, the college was transferred to Newark and Rev. Aaron Burr (the father of Jefferson's vice-president) became the second president. In 1756 the college was moved to the town of Princeton due to the generosity of the residents there, who offered £1000 proclamation money, 200 acres of woodland, and 10 acres of cleared land for the establishment of the college.

The new college building, completed in 1756, was at the time the largest college building in the colonies. It was named Nassau Hall in honor of King William III of England, a member of the House of Nassau, at the suggestion of Gov. Belcher of New Jersey who modestly declined the request of the trustees that he allow the college to be named after him. President Burr died in September 1757 and was succeeded by Rev. Jonathan Edwards of Stockbridge, Mass., who lived for only a few months after arriving at Princeton.

Despite the fact that several of its early presidents died after relatively brief tenure, they were able to place the college on a solid footing. Princeton's low tuition charges and comparatively mild admissions requirements also increased its notoriety, and students were attracted to the college from both New England and the South. By the time of the American Revolution, the college enrollment had increased to almost 100 students.

The College of New Jersey was directed largely along the traditional lines of older colonial colleges. It copied Yale's example of a single board of nonresident trustees, but while Presbyterian clergymen dominated this board, membership also included other denominations.

As already noted, the initial purpose of the college, like other colonial schools, was the preparation of ministers, and one-half of Princeton's prerevolutionary graduates entered the clergy. Consequently, the original curriculum was classical and patterned after models already in use at Yale. A broadening of Princeton's curriculum to include more secular studies occurred during the presidency of Samuel Davies (1759-61), and especially during the tenure of Rev. John Witherspoon (1768-94). Yet by the end of the colonial period, the course of study retained many traditional features.

The College of New Jersey attained much prominence during the American Revolution. Its president, Dr. John Witherspoon, took a very active part throughout the struggle and was one of the signers of the Declaration of Independence. Among the students of the college who became leading figures in the war, and in the solution of the constitutional problems the successful outcome of the war produced, were James Madison, Aaron Burr, Gunning Bedford, William Bradford, Philip Freneau, Henry Bruckholst Livingston, Hugh Henry Brackenridge, Morgan Lewis and Henry Lee. During the war the course of instruction was interrupted by the presence at different times of both armies, the wrecking of Nassau Hall, and the scattering and near destruction of the college library.

The major histories and specialized studies for this period are by Samuel Davies Alexander, *Princeton College during the Eighteenth Century* (New York, A.D.F. Randolph, 1872); Francis Broderick, "Pulpit, Physics, and Politics: The Curriculum of the College of New Jersey, 1746-1794" (*William and Mary Quarterly*, 3d series, 6:42-68, 1949); Nelson R. Burr, *Education in New Jersey, 1630-1871* (Princeton, N.J., Princeton University Press, 1942); Sheldon S. Cohen and Larry R. Gerlach, "Princeton and the Coming of the American Revolution" (*New Jersey History* 92:69-72, 1974); Donald R. Come, "The Influence of Princeton on Higher Education in the South Before 1825" (*William and Mary Quarterly*, 3d series, 2:359-76, 1945); Darrell L. Guder, "The Story of Belles Lettres at Princeton: An Historical Investigation of the Expansion and Secularization of Curriculum of English Language and Letters" (Ph.D. diss., University of Hamburg, 1964); David C. Humphrey, "The Struggle for Sectarian Control of Princeton, 1745-1760" (*New Jersey History* 91:77-90, 1973); Wheaton J. Lane, *Pictorial History of Princeton* (Princeton, N.J., Princeton University Press, 1947); John Maclean, *History of the College of New Jersey, from its Origin in 1746 to the Commencement of 1854* (2 vols., Philadelphia, Lippincott, 1877); James McLachlan, *Princetonians, 1748-1768: A Biographical Dictionary* (Princeton, N.J., Princeton University Press, 1976); Howard Miller, *The Revolutionary College: American Presbyterian Higher Education, 1701-1837* (New York, New York University Press, 1976), and "Evangelical Religion and Colonial Princeton" in Laurence Stone, ed., *Schooling and Society: Studies in the History of Education* (Baltimore, Johns Hopkins Press, 1976, pp. 115-45); John M. Murrin, "Princeton and the American Revolution" (*Princeton University Library Chronicle* 38:1-10, Autumn 1976); Alison B. Olson, "The Founding of Princeton University: Religion and Politics in Eighteenth Century New Jersey" (*New Jersey History* 87:113-50, 1969); Charles G. Osgood, *Lights in Nassau Hall: Book of the Bicentennial, Princeton, 1746-1946* (Princeton, N.J., Princeton University Press, 1951); William Paterson, *Glimpses of Colonial Society and Life at Princeton College, 1766-1773* (Philadelphia, Lippincott, 1903); George C. Rockefeller, "Books, Pamphlets and Broadsides Relating to Princeton University, 1801-1819" (*Princeton University Library Chronicle* 32:119-28, 1971); Peter Sammartino, *A History of Higher Education in New Jersey* (New York, P.S. Barnes, 1978); George P. Schmidt, *Princeton and Rutgers—The Two Colonial Colleges of New Jersey* (Princeton, N.J., Van Nostrand, 1964); Douglas Sloan, *The Scottish Enlightenment and the American College Ideal* (New York, Teachers College Press, 1971), which describes the impact of the Scottish Enlightenment and universities on American higher education in the years 1740-1810, and especially on Princeton presidents John Witherspoon and Samuel Stanhope Smith, and on Francis Alison of Philadelphia and Benjamin Rush of the College of Philadelphia; Thomas J. Wertenbaker, *Princeton, 1746-1896* (Princeton, N.J., Princeton University Press, 1946); and John R. Williams, *Academic Honors in Princeton University, 1748-1902* (Princeton, N.J., Princeton University, 1902).

More specialized studies include those by Frederick Beasley in "An Account of the Life and Writings of the Rev. Samuel Stanhope Smith," in Smith's *Sermons of Samuel Stanhope Smith* (Philadelphia, S. Potter, 1821, vol. 1, pp. 3-60); George H. Bost, "Samuel Davies as President of Princeton, 1758-1761" (*Journal of the Presbyterian Historical Society* 26:165-81, 1948), and "Samuel Davies, Preacher of the Great Awakening" (*Historical Magazine of the Protestant Episcopal Church* 26:65-86, 1948); Miles L. Bradbury, "Samuel Stanhope Smith, Princeton's Accommodation to Reason" (*Journal of Presbyterian History* 48:189-202, 1970), and *Adventure in Persuasion: John Witherspoon, Samuel Stanhope Smith, and Ashbel Green* (Cambridge, Mass., Harvard University Press, 1967); Varnum L. Collins, *Princeton* (New York, Oxford University Press, 1914); Edward G. Conklin, "Biology at Princeton [1796-1948]" (*Bios* 19:150-71, 1948); Graaf van Gijsbertkarel, *The College at Princeton, May 1784...with an Introduction by Howard C. Rice* (Princeton, N.J., Princeton University Press, 1949); Craig Gilborn, "The Reverend Samuel Davies in Great Britain" (*Winterthur Portfolio* 8:45-62, 1973), which describes Davies's fund-raising activities in Great Britain between 1753 and 1755; Thomas P. Govan, "Nicholas Biddle at Princeton, 1799-1801" (*Princeton University Library Chronicle* 9:49-63, 1947); Ralph Ketcham, "James Madison at Princeton" (*Princeton University Library Chronicle* 28:24-54, 1966); Michael Kraus, "Charles Nisbet and Samuel Stanhope Smith: Two Eighteenth Century Educators" (*Princeton University Library Chronicle* 6:17-36, 1944); William B. Meade, "Princeton Riot of 1807" (*William and Mary Quarterly*, 1st series, 16:119-21, 1907); Howard Miller, "The 'Frown of Heaven,' and 'Degenerate America': A Note on the Princeton Presidency" (*Princeton University Library Chronicle* 31:38-46, 1969), on the significance of the early deaths of the first 5 presidents of Princeton before Witherspoon took office in 1766; Samuel Holt Monk, "Samuel Stanhope Smith, Friend of Rational Liberty," in Willard Thorpe, ed., *The Lives of Eighteen from Princeton* (Princeton, N.J., Princeton University Press, 1946, pp. 86-110); Philip G. Nordell, "Lotteries in Princeton's History [1749-1774]" (*Princeton University Library Chronicle* 15:16-37, 1953); Princeton University, *Catalogue of All Who Have Held Office in or Have Received Degrees from the College of New Jersey at Princeton* (Princeton, N.J., Princeton University Press, 1896), which covers the period 1746-1896; Princeton University, *General Catalogue, 1746-1906* (Princeton, N.J., Princeton University, 1908); Howard C. Rice, "Jonathan Edwards at Princeton (1758), with a Survey of Edwards Materials in the Princeton University Library" (*Princeton University Library Chronicle* 15:69-86, 1954); Henry L. Savage, "Jonathan Belcher and 'Our Young College'" (*Princeton University Library Chronicle* 19:191-96, 1958), on his efforts during his governorship of New Jersey to promote the interests of the College of New Jersey; Douglas Sloan, "The Scottish Enlightenment, Princeton, and Republican Education," in William C. Wright, ed., *Economic and Social History of Colonial New Jersey: Papers Presented at the Fifth Annual New Jersey History Symposium, December 1, 1973* (Trenton, New Jersey Historical Commission, 1974, pp. 64-77), which focuses on Samuel Stanhope Smith's presidency at Princeton; Gilbert Tennent Snowden, "The Journal of Gilbert Tennent Snowden" (*Princeton University Library Chronicle* 14:72-90, 1953), which includes excerpts from this student's diary during his stay at the college during 1783-85; Gilbert Tennent, *A General Account of the Rise and State of the College, Lately Established in the Province of New-Jersey, in America...* (New York, printed by James Parker, 1752); George

R. Wallace, *Princeton Sketches: The Story of Nassau Hall* (New York, Putnam, 1893); Thomas J. Wertenbaker, "The College of New Jersey and the Presbyterians" (*Journal of the Presbyterian Historical Society* 36:209-16, 1958); and James W. Wilkin, "The Diary of James W. Wilkin of the Class of 1785" (*Princeton University Library Chronicle* 12:55-66, 1951), which covers the period Feb. 23-July 31, 1784.

A wealth of historical as well as anecdotal information is also contained in *The Princeton Book; A Series of Sketches Pertaining to the History, Organization and Present Condition of the College of New Jersey by Officers and Graduates of the College* (Boston, Houghton, Osgood, 1879); and Alexander Leitch, *A Princeton Companion* (Princeton, N.J., Princeton University Press, 1978), which includes some 400 articles in an encyclopedia format. Included among these articles are the following: biographical sketches of 125 eminent Princetonians; historical articles about Princeton's trustees, its charter, its seal, and its endowment; a description of the organization and development of the faculty; histories of all of Princeton's departments of instruction and research and many of its special programs; accounts of student life; full accounts of alumni activities; an historical acount of the development of the campus and of its different architectural styles; and individual histories and descriptions of various buildings.

President Witherspoon's early American correspondence (1766-70) with Benjamin Rush, Ezra Stiles and others has been collected in L.H. Butterfield, ed., *John Witherspoon Comes to America; A Documentary Account Based Largely on New Materials* (Princeton, N.J., Princeton University Library, 1953). The best studies of his life and educational philosophy are those by Varnum L. Collins, *President Witherspoon: A Biography* (2 vols., Princeton, N.J., Princeton University Press, 1925); Richard M. Gummere, "A Scottish Classicist in Colonial America" (*Publications of the Colonial Society of Massachusetts* 35:146-61, 1942/46); Sloan (1971,1973); Martha L.L. Stohlman, *John Witherspoon: Parson, Politician, Patriot* (Philadelphia, Westminster Press, 1976); Wilson P. Paul, "John Witherspoon's Theory and Practice of Public Speaking, 1768-1794" (*Speech Monographs* 16:272-89, 1949); and Thomas J. Wertenbaker, "John Witherspoon: Father of American Presbyterianism; Maker of Statesmen," in Willard Thorp, ed., *The Lives of Eighteen from Princeton* (Princeton, N.J., Princeton University Press, 1946, pp. 68-85).

A compilation of the early laws of Princeton is contained in *Laws of the College of New Jersey Received, Amended and Finally Adopted, by the Board of Trustees in April 1794, to which are Prefixed, the Charter of Incorporation, the Acts of the State Confirming and Altering the Charter, and a List of the Present Trustees and Faculty of the College* (Trenton, N.J., printed by Isaac Collins, 1794). A similar compilation was published in 1802.

The importance of early scientific teaching at Princeton and the role that David Rittenhouse (1732-96) played in its development are treated in the following studies: Maurice J. Babb, "David Rittenhouse" (*Pennsylvania Magazine of History and Biography* 56:193-224, 1932); William Barton, *Memoirs of the Life of David Rittenhouse, LL.D., F.R.S....* (Philadelphia, Edward Parker, 1813); Edward Ford, *David Rittenhouse, Astronomer—Patriot, 1732-1796* (Philadelphia, University of Pennsylvania Press, 1946): Brook Hindle, *David Rittenhouse* (Princeton, N.J., Princeton University Press, 1964); and Howard C. Rice, *The Rittenhouse Orrery: Princeton's Eighteenth-Century Planetarium, 1767-1954* (Princeton, N.J., Princeton University Press, 1954).

Princeton's first major gift of books was some 474 volumes (250 titles) donated by Gov. Jonathan Belcher in 1755. Other gifts soon followed from friends in America and England. When Dr. Witherspoon became president of the college in 1768, he added 300 volumes of pamphlets, but the library still contained fewer than 2000 when it was, as already mentioned, virtually destroyed during the Revolution. For further information, consult Steward M. Robinson, "Notes on the Witherspoon Pamphlets" (*Princeton University Library Chronicle* 27:53-57, 1965/66). By the end of the century, the library's collection had grown to 3000 volumes, only to be largely destroyed in the disastrous Nassau Hall fire of 1802.

The definitive history of the colonial Princeton University Library, William S. Dix's "The Princeton University Library in the Eighteenth Century" (*Princeton University Library Chronicle* 40:1-102, 1978), was completed shortly before his death in 1978. At that time, Dix, the former director of the Princeton University Library, was working on a comprehensive history of the library. In addition to Dix's work, other histories of the Princeton library in the colonial and early republican periods are included in the following studies: Kevork Berberian, "Princeton University Library, 1746-1860" (Master's thesis, Jersey City State College, 1975/76); "A History of Princeton Libraries" (*Princeton Alumni Weekly* 49:5-9, April 1949); Ernest C. Richardson, "The University Library" (*Princeton University Bulletin* 9:73-92, May 1898); and Frederick Vinton, "The College Library," in *The Princeton Book* (1879, pp. 250-57).

The only known catalog of the collection to survive was printed in 1760 by James Parker and prepared under the direction of Samuel Davies during the first year of his presidency, partly for the purpose of seeking contributions: Princeton University. Library. *A Catalogue of Books in the Library of the College of New Jersey, January 29, 1760. Pub. by Order of the Trustees at Woodbridge, New Jersey by James Parker, 1760.* (Princeton, N.J., reprinted by the Friends of the Library, 1949). In "The Book Collections of Early American Colonial College Libraries" (1973, pp. 150-51), Kraus provides a subject analysis of the listed 737 titles of 1281 volumes, as well as a bibliographical review of the more significant titles. Of the titles, 46% were theological in nature, with literature, history, science, philosophy, biography, geography, law and government being the other major subjects in that order. Ranz (1964) and Ruth Schley's "Cataloging in the Libraries of Princeton, Columbia and the University of Pennsylvania Before 1876" (Master's thesis, Columbia University, 1946) should also be consulted.

University of Pennsylvania

The University of Pennsylvania had its origin in a tract written by Benjamin Franklin, entitled "Proposals Relating to the Education of Youth in Pensilvania" (1749). Soon after its publication, 24 public-spirited citizens of Philadelphia associated themselves for the purpose of establishing an academy. The academy opened in 1751 with Benjamin Franklin as the first president of trustees. In 1755 it became the College, Academy and Charitable School of Philadelphia with William Smith as provost. Provost Smith advocated a practical type of higher education aimed at producing a wise and useful citizenry.

During the next 20 years, the College of Philadelphia remained a small but progressive institution. Although Provost Smith had advocated the projected nondenominational control of the college, it soon came under Episcopal domination, and Smith himself became a target of considerable criticism. This factor, as well as the Quaker animosity toward higher education, helped limit the total student enrollment. Nevertheless, the college took some forward-looking steps prior to the American Revolution. Provost Smith introduced a liberal 3-year undergraduate curriculum that emphasized not only the classics but also modern languages, mathematics, philosophy, physics, oratory and the natural and social sciences. Later, in 1765 Dr. John Morgan established a medical school in connection with the college. The College of Philadelphia then became the first institution in the colonies to appoint a professor of chemistry; the man selected for this work was the eminent Dr. Benjamin Rush, an advocate of many of Franklin's liberal educational ideals. A law school dates from 1790.

During the revolutionary war, in 1779, the Pennsylvania General Assembly voided the college's charter, alleging that the institution violated the state's constitutional guarantee of equal privileges for all denominations, and instead created the University of the State of Pennsylvania. With its charter restored (1789), the college was joined in 1791 with the university under the name of the University of the State of Pennsylvania. For the next 20 years the university was embroiled in political maneuverings which finally ended in 1811, when it was reorganized as a private institution under its present name.

The standard sources for the early history of the University of Pennsylvania include the classic work by Edward P. Cheyney, *History of the University of Pennsylvania, 1740-1940* (Philadelphia, University of Pennsylvania Press, 1940) plus studies by Frank Freidel, "A Plan for Modern Education in Early Philadelphia" (*Pennsylvania History* 14:115-84, 1947); Warren B. Fruechtel, "Relation of the State to Higher Education in Pennsylvania, 1776-1874" (Ph.D. diss., University of Pittsburgh, 1965); Ann D. Gordon, "The College of Philadelphia, 1749-1779: The Impact of an Institution" (Ph.D. diss., University of Wisconsin at Madison, 1975); Thomas H. Montgomery, *A History of the University of Pennsylvania from its Foundation to A.D. 1770, Including Biographical Sketches of the Trustees, Faculty, the First Alumni, and Others* (Philadelphia, George W. Jacobs, 1900); Saul Sack, *History of Higher Education in Pennsylvania* (2 vols., Harrisburg, Pennsylvania Historical and Museum Commission, 1963); William L. Turner, "The College, Academy, and Charitable School of Philadelphia: The Development of a Colonial Institution of Learning" (Ph.D. diss., University of Pennsylvania, 1952), and "The Early Buildings of the University of Pennsylvania, 1740-1829" (*General Magazine and Historical Chronicle* 53:1-16, 1950); George B. Wood, *Early History of the University of Pennsylvania, from Its Origin to the Year 1827* (3d ed., Philadelphia, Lippincott, 1896); Horace M. Lippincott, *George Washington and the University of Pennsylvan*[illegible] (Philadelphia, General Alumni Society, 1916); and Martin Meyerson and Dilys P. Winegrad, *Gladly Learn and Gladly Teach: Franklin and His Heirs at the University of Pennsylvania, 1740-1976* (Philadelphia, University of Pennsylvania Press, 1978), which "through a series of portraits of the scholars and educators who have left their mark on the university and whose influence has been felt beyond its walls the history of the first institution in America to be designated a university comes to life" (dust jacket). A description of the collection of materials pertaining to the early history of the University of Pennsylvania is found in Edith Hartwell, "The Founders' Room" (*University of Pennsylvania Library Chronicle* 4:51-57, 1936).

Provost Smith's *Account of the College, Academy and Charitable School of Philadelphia in Pennsylvania* (Philadelphia, University of Pennsylvania Library, 1951) is still an important source for the University of Pennsylvania's early history. In 1894 the University of

Pennsylvania's Alumni Society published a *Biographical Catalogue of the Matriculates of the College, together with lists of the members of the college faculty and the trustees, officers and recipients of honorary degrees, 1749-1893* (Philadelphia, printed for the Society, 1894).

John H. Best has edited an anthology of Benjamin Franklin's writings on education and provided an excellent essay on Franklin's education ideas in *Benjamin Franklin on Education* (New York, Bureau of Publications, Teachers College, Columbia University, 1962). Franklin's role in the founding of the University of Pennsylvania and its early educational activities have been studied by Melvin Buxbaum, "Benjamin Franklin and William Smith, Their School and Their Dispute" (*Historical Magazine of the Protestant Episcopal Church* 39:361-82, 1970); M. Roberta Warf Keiter, "Benjamin Franklin as an Educator" (Ph.D. diss., University of Maryland, 1957); Jonathan Messerli, "Benjamin Franklin: Colonial and Cosmopolitan Educator" (*British Journal of Educational Studies* 16:43-59, 1968); John J. O'Neill, "Analysis of Franklin's *Proposals Relating to the Education of Youth in Pennsylvania* as a Selection of Eighteenth Century Cultural Values" (Ph.D. diss., Harvard University, 1960); Thomas J. Powers, "Benjamin Franklin and His Views and Opinions on Education" (Ph.D. diss., Michigan State University, 1965); Francis N. Thorpe, *Benjamin Franklin and the University of Pennsylvania* (Washington, D.C., USGPO, 1893); Oliver B. Huckel, "Benjamin Franklin and George Whitefield—Founding Fathers" (*General Magazine and Historical Chronicle* 40:372-82, 1938), which recalls the part played by these 2 men in the founding of the University of Pennsylvania; John H. Morice, "Franklin and the University of Pennsylvania" (*General Magazine and Historical Chronicle* 41:269-73, 1939), which summarizes briefly the numerous references which Benjamin Franklin made in his writings to the Academy, College and Charitable School of Pennsylvania; and Benjamin Franklin, "Proposals Relating to the Education of Youth in Pennsylvania" (*Journal of General Education* 28:256-61, 1976), which reprints the 1749 plan that included both practical and theoretical subjects and proposed to approach all studies through one central discipline, reflecting his concern for coherence in academic programs and his desire to identify certain disciplines as basic fields of knowledge leading to others.

The controversial life, career and educational ideas of Provost Smith have engendered many studies including the following: Buxbaum (1970); Don R. Byrnes, "The Pre-revolutionary Career of Provost William Smith, 1751-1780" (Ph.D. diss., Tulane University, 1969); Bertha S. Fox, "Provost Smith and the Quest for Funds" (*Pennsylvania History* 2:225-38, 1935); F.A. William Gegenheimer, *William Smith: Educator and Churchman, 1727-1803* (Philadelphia, University of Pennsylvania Press, 1943); Bruce R. Lively, "William Smith, the College and Academy of Philadelphia, and Pennsylvania Politics" (*Historical Magazine of the Protestant Episcopal Church* 38:237-58, 1969); William R. Peters, "The Contributions of William Smith, 1727-1803, to the development of Higher Education in the United States" (Ph.D. diss., University of Michigan, 1968); and Horace W. Smith, *The Life and Correspondence of the Reverend William Smith, D.D., First Provost of the College and Academy of Philadelphia, First President of Washington College, Maryland* (2 vols., Philadelphia, Ferguson Bros., 1880). Thomas R. Adams has compiled *Trial Check List of the Writings of William Smith, First Provost of the University of Pennsylvania* (Philadelphia, University of Pennsylvania Library, 1950).

The services of Benjamin Rush (1745-1813) to American education, including his role at the University of Pensylvania, are outlined in: Carl A.L. Binger, *Revolutionary Doctor: Ben-*

jamin Rush, 1746-1813 (New York, Norton, 1966); James Bonar, "Benjamin Rush and the Theory and Practice of Republican Education in Pennsylvania" (Ph.D. diss., Johns Hopkins, 1965); Harry G. Good, *Benjamin Rush and His Services to American Education* (Berne, Ind., Witness Press, 1918); Nathan G. Goodman, *Benjamin Rush, Physician and Citizen, 1746-1813* (Philadelphia, University of Pennsylvania Press, 1934); David F. Hawke, *Benjamin Rush, Revolutionary Gadfly* (Indianapolis, Bobbs-Merrill, 1971); Hyman Kuritz, "Benjamin Rush: His Theory of Republican Education" (*History of Education Quarterly* 7:432-51, 1967); and Meyer Reinhold, "Opponents of Classical Learning in America during the Revolutionary Period" (*Proceedings of the American Philosophical Society* 112:228-34, 1968). *The Autobiography of Benjamin Rush,* edited by George W. Corner (Princeton, N.J., Princeton University Press, 1948), should also be consulted.

A not unusual method of financing higher education in early America, the lottery, is covered by Harold E. Gillingham, "Lotteries in Philadelphia, Prior to 1776" (*Pennsylvania History* 5:77-100, 1938); and Philip G. Nordell, "The Academy Lotteries: A Chapter in the Early History of the University of Pennsylvania" (*University of Pennsylvania Library Chronicle* 19:51-76, 1963), which describes lotteries from 1754-61.

Although no specialized works have been published concerning all of the institution's curriculum and instructional programs, the following works should be consulted: Whitfield Bell, "Science and Humanity in Philadelphia" (Ph.D. diss., University of Pennsylvania, 1947); Theodore S. Hornberger, "A Note on the Probable Sources of Provost Smith's Famous Curriculum for the College of Philadelphia" (Pennsylvania Magazine of History and Biography 58:370-77, 1934); Genevieve Miller, "Medical Schools in the Colonies" (*Ciba Symposia* 8:522-32, 1947); Byron Stookly, "America's Two Colonial Medical Schools" (*Bulletin of the New York Academy of Medicine* 40:269-84, 1964); Frederick C. Waite, "Medical Degrees Conferred in the American Colonies and in the United States in the Eighteenth Century" (*Annals of Medical History,* n.s., 9: 314-20, 1937); Herbert S. Klickstein, "A Short History of the Professorship of Chemistry at the University of Pennsylvania School of Medicine, 1765-1847" (*Bulletin of the History of Medicine* 27:43-68, 1953); Richard H. Shryock, "A Century of Medical Progress in Philadelphia, 1750-1850" (*Pennsylvania History* 8:7-28, 1941); Saul Sack, "The Birth of American Medical Education" (*Pennsylvania History* 3:97-132, 1963); Edgar F. Smith, "Early Scientists of Philadelphia" (*Pennsylvania Magazine of History and Biography* 47:1-27, 1923); Perry W. Smith, "'Exercises' Presented during the Commencements of the College of Philadelphia and Other Colonial Colleges" (*Pennsylvania History* 7:182-222, 1967); Thomas R. Adams, "The Commencement Dialogues and Odes of the College of Philadelphia" (*University of Pennsylvania Library Chronicle* 17:30-37, 1950), which includes a checklist for the period 1761-90; Joseph S. Hepburn, "The Chemical Society of Philadelphia and Certain Local Institutions" (*Franklin Institute Journal* 261:527-46, 1956), covering the period 1792-ca. 1809, and "Pioneer Biochemical Researches at the University of Pennsylvania, 1765-1803" (*Franklin Institute Journal* 261:637-48, 1956); Wyndham D. Miles, "Joseph Black, Benjamin Rush, and the Teaching of Chemistry at the University of Pennsylvania" (*University of Pennsylvania Library Chronicle* 22:1-8, 1956); Robert F. Seybolt, "Some Notes on the Teaching of German in Colonial Philadelphia" (*Journal of English and German Philology* 23:418-21, 1924); and David H. Wenrich, "Biology at the University of Pennsylvania" (*Bios* 22:150-90, 1951), which surveys the period 1754-1951.

The beginnings of the University of Pennsylvania libraries date from 1749 when Richard Jackson, a London lawyer and politician, donated several books to the newly formed Philadelphia Academy. Gifts from the trustees of the academy, particularly Benjamin Franklin and Lewis Evans, followed. The trustees soon appointed a committee, led by Franklin, to select books for the students of the academy. The money to purchase these books was to have been acquired through a system of fines upon trustees absent from meetings and fees collected from students upon issuance of degrees. Income from these measures was small, and since no regular source of income was provided for, the growth of the library depended on gifts from benefactors and on fund-raising drives and lotteries. For example, Provost Smith conducted a fund-raising campaign in England during 1762-64; and Dr. John Morgan, the founder of the Medical School, raised funds in the West Indies in 1772. A substantial gift of 100 volumes (36 titles) of scientific, historical and literary works from l'Imprimerie Royale was received in 1784 from Louis XVI of France in appreciation for the honorary degree conferred upon the Marquis de Chastelux. Unfortunately, no published catalogs of the Pennsylvania collections have survived.

Kraus argues that "the availability of the Library Company of Philadelphia, . . . which grew to 2,033 titles by 1770, probably made the development of a college library less urgent than in the other colonial colleges."[17] Even by 1803, well after the small collection's partial destruction during the revolutionary war, the library consisted of only 1000 volumes.

Although no detailed works on the early history of the University of Pennsylvania libraries have been written, the following titles do provide some basic information: Toby Heidtmann, "University of Pennsylvania Libraries," in Allen Kent, et al, eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1977, vol. 22, pp. 1-4); Sarah Dowlin Jones, "The Early Years of the University Library" (*University of Pennsylvania Library Chronicle* 17:8-22, 1950), which emphasizes the period 1750-64; Margaret B. Korty, "Benjamin Franklin and Eighteenth-Century American Libraries" (*Transactions of the American Philosophical Society*, new series, vol. 55, part 9, Dec. 1965), in which the author employs primary documents to trace Franklin as the founder of the first subscription library, his assistance to other infant libraries in 5 colonies, and his organization in supplying books to 6 kinds of institutions, including colleges and religious bodies; Joe W. Kraus, "The Book Collections of Five Colonial College Libraries" (1960, pp. 91-94); M. Elizabeth Shinn, "*Sine Quibus Non;* The University of Pennsylvania Libraries" (*University of Pennsylvania Library Chronicle* 17:23-29, 1950); and C. Seymour Thompson, "The Gift of Louis XVI" (*University of Pennsylvania Library Chronicle* 2:36-48, 60-67, 1934), and "The University Library" (*University of Pennsylvania Library Chronicle* 1:48-52, 1933).

Columbia University

It was not until the final decades of the colonial period that New York established an institution of higher education. Formal efforts to establish a college began during the 1740s and were led by the colonial legislature as well as by permanent secular and religious residents of New York City. The proposal to found such a college, including the use of a fund-raising lottery, was approved in 1747. Considerable sums were raised during the next few years, but quarrels among many of the colony's diverse religious sects over the control and location of the proposed college delayed its opening; see Samuel K. Anderson, "Public

Lotteries in Colonial New York" (*The New York Historical Society Quarterly* 66:139-41, 1972). Finally, the disagreement was settled through the establishment of a nondenominational board of trustees and a provision that the college president must always be an Episcopalian. On July 17, 1754, King's College opened in New York City's Trinity Church with 8 students and Rev. Dr. Samuel Johnson as its president and sole faculty member.

During the subsequent 2 decades, King's College existed as a small though liberally oriented institution. By 1775 less than 200 students had been enrolled in the budding institution, while less than 100 were listed as graduates. Under the presidency of Dr. Johnson, a man distinguished among the colonists of the eighteenth century for scholarship and philosophical insight, the school followed its initial 1754 progressive declaration that "as to religion, there is no intent to impose on the scholars the peculiar tenets of any particular sect of Christians." In this same announcement the college president proposed an advanced curriculum which would include "the arts of numbering and measuring, surveying and navigation, of geography and history, of husbandry, commerce and government, and in the knowledge of all nature."[16] While the impossibility of actually teaching such widely diversified studies led to the adoption of a generally traditional curriculum, the college nevertheless made some progressive moves within its course offerings. In 1757 it founded a professorship of mathematics and natural philosophy, in 1767 it organized a medical department, and in 1773 the college began its instruction in law.

The loyalist Myles Cooper succeeded Johnson in 1763, but Cooper returned to England in 1775, and the college was closed in 1776, soon after the Revolution began. In 1784 the institution was reopened and renamed Columbia College. The new president was William Samuel Johnson, one of the framers of the Constitution and the son of the original head of King's College, and probably the first lay college president among English-speaking peoples.

The basic histories of King's and Columbia Colleges are those by: Dwight C. Miner, ed., *A History of Columbia College on Morningside* (New York, Columbia University Press, 1954); Edward C. Elliot, *The Rise of a University...*(2 vols., New York, Columbia University Press, 1937); David C. Humphrey, *From King's College to Columbia, 1746-1800* (New York, Columbia University Press, 1976); and *A History of Columbia University, 1754-1904* (New York, Columbia University Press, 1904). The works of Elliot and Humphrey are the most important for coverage of the pre-1800 period. Humphrey has also written a splendid piece on the King's College Medical School: "The King's College Medical School and the Professionalization of Medicine in Pre-Revolutionary New York" (*Bulletin of the History of Medicine* 49:206-34, 1975). Medical education at Columbia is also covered by: Genevieve Miller, "Medical Schools in the Colonies" (*Ciba Symposia* 8:522-32, 1947); Saul Sack, "The Birth of American Medical Education" (*Pennsylvania History* 3:97-132, 1963); Byron Stookly, "America's Two Colonial Medical Schools" (*Bulletin of the New York Academy of Medicine* 40:269-84, 1964), and *A History of Colonial Medical Education in the Province of New York, with Its Subsequent Development, 1767-1830* (Springfield, Ill., Thomas, 1962); and Frederick C. Waite, "Medical Degrees Conferred in the American Colonies and in the Eighteenth Century" (*Annals of Medical History*, n.s., 9:314-20, 1937).

Other studies on King's College that should be consulted include: Frank C. Abbott, *Government Policy and Higher Education: A Study of the Regents of the University of the State of New York, 1784-1949* (Ithaca, N.Y., Cornell University Press, 1958); *Early Minutes* *of the Trustees, Volume 1, 1755-1770* (New York, Columbia University, 1932); Donald F.M. Gerardi, "The King's College Controversy 1753-1756 and the Ideological Roots of Toryism in New York" in Donald Fleming, ed., *Perspectives in American History* (Cambridge, Mass., Charles Warren Center for Studies in American History, Harvard University, vol. 11, 1977-78); Beverly McAnear, "American Imprints Concerning King's College [1752-1772]" (*Papers of the Bibliographical Society of America* 44:301-39, 1950); Charles Mompotency, "The Lutheran Governors of King's College" (*Columbia University Quarterly* 27:436-53, 1935,) which includes brief biographies of the first two governors of King's College, John Albert Weygand and Bernard Michael Houseal, and "Benjamin Moore [1748-1816], Bishop of New York and President of Columbia College [1801-11]" (*Columbia University Quarterly* 28:165-89, 1936); Dwight C. Miner, "Doctor Cooper Departs" (*Columbia Library Columns* 1:5-11, May 1952), which discusses the loyalist propaganda of Rev. Myles Cooper, President of King's College, and his precipitate flight from a mob, covering the period 1772-75; Samuel L. Mitchell, *The Present State of Learning in the College of New-York* (New York, printed by T. and J. Swords, 1794); John B. Pine, "King's College and the Early Days of Columbia College" (*New York State Historical Association Proceedings* 17:108-23, 1919); William Smith, *A General Idea of the College of Mirania* (New York, Johnson Reprint Corp., 1969; reprint of the 1753 edition); and David C. Humphrey, "Urban Manners and Rival Morals: The Controversy over the Location of King's College" (*New York History* 54:5-23, 1973), whose author contends that while the intense denominational conflict that flared between 1752 and 1754 cannot be ignored, its significance has been exaggerated in the past. The decision to locate the college in New York was the greater issue; however, the elitist values of the factions were of equal importance in defining the character of the college. According to Humphrey, "from the very first day of classes in 1754, the college's urban location would influence its appeal to parents, the nature of its undergraduate life, and its impact on New York society and politics."[19] After the American Revolution, the new Columbia College was "managed by an urban elite primarily to suit its own needs and outlooks, and the urbanism of its students and undergraduate life was more decisive than ever."[20]

Items of bibliographical interest for the history of Columbia College include: Alfred H. Lane, "*Ex Libris Universitatis Columbiae*" (*Columbia Library Columns* 3:4-7, Feb. 1953), which describes bookplates designed for Columbia University since 1795; Dallas Pratt, "The Editor Visits Columbiana" (*Columbia Library Columns* 1:26-29, May 1952), which discusses the Columbiana Collection of the Columbia Libraries; and Charles A. Nelson, *Columbiana: A Bibliography of Manuscripts, Pamphlets and Books Relating to the History of King's College, Columbia University, Published on the One Hundred and Fiftieth Anniversary of King's College* (New York, Columbia University Library, 1904).

Samuel Johnson's role as founder and first president of the institution is discussed in articles by Don R. Gerlach, "Samuel Johnson and the Founding of King's College, 1751-1755" (*Historical Magazine of the Protestant Episcopal Church* 44:335-52, 1975), and "Samuel Johnson: Praeses Collegii Regis, 1755-1763" (*Historical Magazine of the Protestant Episcopal Church* 44:417-36, 1975); Norman S. Fiering, "President Samuel Johnson and the Circle of Knowledge" (*William and Mary Quarterly*, 3d series, 28:199-236, 1971); Theodore S. Hornberger, "Samuel Johnson of Yale and King's College: A Note on the Relation of Science and Religion in Provincial America" (*New England Quarterly* 8:378-97, 1935); and in the masterful work by Herbert Schneider and Carol Schneider, *Samuel*

Johnson, President of King's College: His Career and Writings (4 vols., New York, Columbia University Press, 1929).

The presidency of William Samuel Johnson is described in the works of Eben E. Beardsley, *Life and Times of William Samuel Johnson, LL.D., First Senator in Congress from Connecticut, and President of Columbia College, New York* (2d ed., New York, Hurd & Houghton, 1876); George C. Groce, *William Samuel Johnson, A Maker of the Constitution* (New York, Columbia University Press, 1937); and Elizabeth McCaughey, "William Samuel Johnson: Loyalist and Founding Father" (Ph.D. diss., Columbia University, 1976).

Outside of the in-depth works on King's College Medical School and Helen P. Roach's monograph on speech education at Columbia, *History of Speech Education at Columbia College, 1754-1940* (New York, Teachers College Press, 1950), there have been only a few brief specialized studies on colonial and early nineteenth-century curriculum and instructional programs: Howard R. Marraro, "Da Ponte and Foresti: The Introduction of Italian at Columbia University" (*Columbia University Quarterly* 29:23-32, March 1937), and "Eleuterio Felice Foresti" (*Columbia University Quarterly* 25:34-64, March 1933); Helen Roach, "The Early Speaking Societies at Columbia College" (*Bulletin of the American Association of University Professors* 41:639-44, 1955); Aldo Caselli, "Mozart's Librettist—First Professor of Italian at Columbia University" (*Columbia Library Columns* 7:21-29, May 1958), on Lorenzo da Ponte; Julia P. Mitchell, "Jean Pierre Tetard—Professor of the French Language, 1784-1787" (*Columbia University Quarterly* 12:286-89, 1910), which describes the teaching career of Tetard, the first professor of French at Columbia College; and Robert F. Seybolt, "The Teaching of French in Colonial New York" (*Romanic Review* 10:364-76, 1919).

The officers and alumni of Columbia have been listed in two 1930s works published under the auspices of its Committee on General Catalogue: Milton H. Thomas, ed., *Columbia University Officers and Alumni, 1754-1857* (New York, Columbia University Press, 1936), and *Columbia University Alumni Register, 1754-1931* (New York, Columbia University Press, 1932). Other studies concerning students and student life are by: Leonhard F. Fuld, *King's College Alumni* (New York, 1913), which consists of brief biographical sketches of alumni of the classes of 1758 to 1776; Vivian C. Hopkins, "The Most Famous Student in Columbia's First Class—De Witt Clinton" (*Columbia Library Columns* 9:9-13, May 1960), whose content describes Clinton's studies at Columbia College and his continued interest in it in the years 1784-1825; Herbert B. Howe, "The Resident Student at Columbia" (*Columbia University Quarterly* 24:311-56, 1932); John B. Pine, "Daniel D. Tompkins, Class of 1795" (*Columbia Library Columns* 9:1-8, Dec. 1960); and Daniel P. Tompkins, *A Columbia College Student in the Eighteenth Century, Essays by Daniel P. Tompkins, Class of 1795* (New York, Columbia University Press, 1940).

Brief histories which cover various aspects of the development of the King's College and Columbia College libraries are provided in articles by: Alice H. Bonnell, "Columbia University Libraries," in Allen Kent, et al., eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1971, vol. 5, pp. 362-70), and "Sundry Gentlemen at Oxford; Some Early 'Friends' of the Columbia Libraries" (*Columbia Library Columns* 25:16-25, May 1976); James H. Canfield, "The Library," in *A History of Columbia University, 1754-1904* (1904, pp. 427-41); Austin B. Keep, "The Library of King's College" (*Columbia University Quarterly* 13:275-84, 1911); and the work of the Schneiders (1929).

They all note that the library was established in 1757 through the bequest of the private library of the renowned lawyer, Joseph Murray, Esq. In 1760 the 1500-volume library of Rev. Duncombe Bristowe, Rector of Hill-Hallows in London, was bequeathed to the Society for the Propagation of the Gospel, which in turn sent a portion of them to King's College.

After Sir James Jay's successful trip to England in 1762 to raise money for the benefit of the college, the library received many individual gifts as well as specific gifts from the "Sundry Gentlemen of Oxford." Oxford University presented copies of publications of the Clarendon Press. This example spurred New York booksellers, e.g., Garrat Noel, Hugh Gaine and William Weyman, to give gifts of their own. It is estimated that by the beginning of the American Revolution the library of King's College contained 2000 volumes. Because of the demand by the British for the college building, the library was removed to City Hall, where fire and bad treatment by British forces caused a large portion of it to be destroyed or lost. About 200 original volumes now survive in the Columbia University Libraries.

Brown University

Brown University, founded in 1764 as Rhode Island College and located at Warren, Rhode Island, is the seventh oldest institution of higher learning in the United States. The college was established as a Baptist institution but with other Christian denominations admitted to a share in the corporate control. The charter was most liberal—the embodiment of a spiritual heritage from Roger Williams—declaring that "all the members hereof shall forever enjoy full, free, absolute, and uninterrupted liberty of conscience."[21]

The first president, James Manning, was elected and the first students were admitted in 1765. The first class was graduated in 1769. In 1770 the college was moved to Providence.

The college was closely associated with the struggle for independence. It was closed from 1777 to 1782, and University Hall, modeled after Princeton's Nassau Hall, was occupied as a hospital and barracks by American and French troops.

In 1804 the College was renamed Brown College in honor of the merchant Nicholas Brown (1769-1841), a 1786 graduate and generous benefactor. No modern histories of pre-1800 Brown exist. The classic work is still that of Walter C. Bronson, *The History of Brown University, 1764-1914* (Providence, R.I., Brown University, 1914), with librarian Reuben A. Guild's nineteenth-century histories still of value, especially for their documents and biographies of President Manning: *Early History of Brown University, Including the Life, Times, and Correspondence of President Manning, 1756-1791* (Providence, R.I., printed by Snow and Farnham, 1897), and *History of Brown University, with Illustrated Documents* (Providence, R.I., Providence Press Co., 1867). Brown University itself published a survey and documentary source, *Historical Catalogue of Brown University, 1764-1904*, in 1905, with further editions published in 1914, 1936 and 1951. These catalogs contain a list of the officers and graduates of Brown University from 1764 along with outline biographies. Studies by Robert P. Brown, et al., eds., *Memories of Brown; Traditions and Recollections Gathered from Many Sources* (Providence, R.I., Brown Alumni Magazine Co., 1909); Noel P. Conlon, "The College Scene in Providence, 1786-1787" (*Rhode Island History* 27:65-71, June 1968); Robert M. Hazleton, *Let Freedom Ring! A Biography of Moses Brown (1738-*

1836) (New York, New Voices, 1957); *The Sesquicentennial of Brown University, 1764-1914: A Commemoration* (Providence, R.I., The University, 1915); and William H. Tolman, *History of Higher Education in Rhode Island* (Washington, D.C., U.S. Bureau of Education, 1898) should also be consulted.

Student activities at Brown during the crucial years 1789-1790 are discussed by Edwin B. Pomfret, "Student Interests at Brown, 1789-1790" (*New England Quarterly* 5:135-47, 1932).

Donald H. Fleming covers briefly the instructional programs in science and technology in *Science and Technology in Providence, 1760-1914* (Providence, R.I., Brown University, 1952).

The library had its beginning in 1767 with donations from President Manning and Rev. Morgan Edwards. It grew slowly and largely without design during its early years. By 1772 it had only 250 volumes. When the college was suspended in December 1777, a manuscript catalog made by President Manning indicates the library contained 607 volumes. In addition to giving a brief history of the library and its content and sources from 1767-82, Henry B. Van Hoesen, with the aid of Brown University library staff, was able to locate more than 500 of these volumes; see his *Brown University Library: The Library of the College or University in the English Colony of Rhode Island and Province Plantations in New England in America, 1767-1782* (Providence, R.I., privately printed, 1938).

In 1783 John Brown of Providence began "a series of benefactions to the College Library that was to be continued by his brothers and their descendants and their families down to the present day."[22] Brown's example encouraged others to give both money and books, so that by the time Brown's *Catalogue of Books Belonging to the Library of Rhode-Island College* (Providence, R.I., printed by J. Carter, 1793) appeared, the collection contained 2173 volumes or 1214 titles. David A. Jonah, "Brown University Library," in Allen Kent and Harold Lancour, eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1970, vol. 3, pp. 383-84) describes the catalog as listing works in a haphazard fashion under author, title or even binder's title. A subject analysis of this catalog, as well as a bibliographical review of the more important titles, is provided by Kraus in "The Book Collections of Early American Colonial College Libraries" (1973, pp. 155-56). This analysis shows that "only about one-third of the books in the library were theological works, the smallest proportion in any of the libraries."[23] Literature, history, science and philosophy accounted for the next highest percentages of the collection.

An interesting study of the reading habits of Brown's more famous alumni, through examination of library circulation records for the period 1787-1895 is H.L. Koopman's "The College Reading of Famous Men, as Illustrated by a Hundred Year's Experience in Brown University" (*Bookman* 61:543-52, 1925). In her *France and Rhode Island, 1686-1800* (New York, King's Crown Press, Columbia University, 1944, pp. 109-14), Mary Ellen Loughrey provides information concerning the extent to which French authors were read in Rhode Island during this period. The Rhode Island College library is included. By 1803 it was estimated that the library contained 3000 volumes.

Rutgers University

Rutgers University, with its main campus at New Brunswick, New Jersey, was chartered as Queen's College in 1766, the eighth of the 9 colonial colleges. The college was called Queen's in honor of George III's royal consort, Charlotte. It was founded in response to a petition of the ministers and elders of the Reformed (Dutch) church in America. In 1825 its name was changed to Rutgers College in honor of Colonel Henry Rutgers, a distinguished citizen of New York, a devoted leader of the Reformed church, and a generous supporter of the college.

The college work did not actually begin until November 1771. The exigencies of the revolutionary war at times compelled the removal of the estimated 20 students from New Brunswick, and until 1825, the university was closed on various occasions.

Unfortunately, Rutger's early records are meager, and therefore, very little is known about the beginnings of the university as well as of its library. The standard histories are those by William H.S. Demarest, *A History of Rutgers College, 1766-1924* (New Brunswick, N.J., Rutgers College, 1924); Richard P. McCormick, *Rutgers: A Bicentennial History* (New Brunswick, N.J., Rutgers University Press, 1966); and George P. Schmidt, *Princeton and Rutgers: The Two Colonial Colleges of New Jersey* (New Brunswick, N.J., Rutgers University Press, 1964); Burr (1942); Peter Sammartino, *A History of Higher Education in New Jersey* (New York, A.S. Barnes, 1978); George W. Pilcher, ed., *The Revered Samuel Davis Abroad: The Diary of a Journey to England and Scotland, 1753-1755* (Urbana, University of Illinois Press, 1967); David L. Cowen, *Medical Education: The Queen's-Rutgers Experience, 1792-1830* (New Brunswick, N.J., State University Bicentennial Commission and Rutgers Medical School, 1966); Richard P. McCormick, "Dutch Origins of Rutgers, the State University" (*Halve Maen*, vol. 41, no. 3, 1966, pp. 7-8, 15; vol. 41, no. 4, 1967, pp. 11-12); George J. Lukac, ed., *Aloud the Alma Mater* (New Brunswick, N.J., Rutgers University Press, 1960); Ernest E. McMahon and Earl S. Miers, *The Chronicles of Colonel Henry* (New Brunswick, N.J., Rutgers University Press, 1935), which is about Henry Rutger; and Philip G. Nordell, "The Rutgers Lotteries" (*Rutgers University Library Journal* 16:1-12, Dec. 1952) should also be consulted. John H. Raven compiled a *Catalogue of the Officers and Alumni of Rutgers College (Originally Queen's College) in New Brunswick, N.J., 1766 to 1916* (Trenton, N.J., State Gazette Publishing Co., 1916).

Apparently, prior to the American Revolution the Queen's College library consisted largely of the books belonging to its faculty. Its first major collection was donated by Rev. Peter Leydt's estate in 1792. Nothing is known about the size or content of his donation nor what other books were already available in the library when the gift was made, according to William H.S. Demarest, "History of the Library" (*Journal of the Rutgers University Library* 1:3, Dec. 1937); Roy F. Nichols, "This Library We Dedicate" (*Journal of the Rutgers University Library*, vol. 20, no. 1, 1956, pp. 3-9); and Virginia P. Whitney and Ann Montanaro, "Rutgers University Libraries" in Allen Kent, et al., eds. *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1979, vol. 26, p. 251).

Dartmouth College

Dartmouth College, the last of the colonial colleges, is the immediate outgrowth of Moor's Indian Charity School established in 1755 by Rev. Eleazar Wheelock (1711-79) for the education of Indians at Lebanon (now Columbia), Connecticut. In 1766-68 the school received an endowment of £10,000 from England. With this endowment Wheelock moved his school to Hanover, New Hampshire, in 1770 and, coincidental with this removal, added to his educational enterprise a college for whites, the royal charter for which was secured through Gov. John Wentworth of New Hampshire in 1769. The college was named for Wheelock's English patron, the second Earl of Dartmouth. In the course of time the Indian school disappeared, but the college persisted. Its first class of 4 members graduated in 1771; since that time no year has passed without a graduating class—a condition (due to Hanover's isolation and the effect of the revolutionary war upon its other 8 sister institutions) true of no other American college.

The standard history of Dartmouth College remains that of Leon Burr Richardson, *History of Dartmouth College* (2 vols., Hanover, N.H., Dartmouth College Publications, 1932). The early relationship between the college and the town of Hanover is related by Frederick Chase in his *History of Dartmouth College and the Town of Hanover, New Hampshire, to 1815*, edited by John K. Lord (2d ed., 2 vols., Brattleboro, Vt., Vermont Printing Co., 1913-28). Other studies that should be consulted include: William Barlow and David O. Powell, "Student Views of the Medical Institution at Dartmouth in 1813 and 1814" (*Historical New Hampshire* 31:92-107, Fall 1976); Jeremy Belknap, *Journey to Dartmouth in 1774*, edited by Edward C. Lathem (Hanover, N.H., Dartmouth Publications, 1950); Sanborn C. Brown and Leonard M. Rieser, *Natural Philosophy at Dartmouth, from Surveyors' Chains to the Pressure of Light* (Hanover, N.H., University Press of New England, 1974); Bruce Arthur Campbell, "Law and Experience in the Early Republic: The Evolution of Dartmouth College Doctrine, 1780-1819" (Ph.D. diss., Michigan State University, 1973); Carleton B. Chapman, *Dartmouth Medical School: The First 175 Years* (Hanover, N.H., University Press of New England, 1973); George T. Chapman, *Sketches of the Alumni of Dartmouth College, from the First Graduation in 1771 to the Present Time; with a Brief History of the Institution* (Cambridge, Mass., Riverside Press, 1867); *Charter, Historical Sketch and Views of College Buildings...* (Hanover, N.H., 1912); Nathan Crosby, *The First Half Century of Dartmouth College: Being Historical Collections and Personal Reminiscences* (Hanover, N.H., J.B. Parker, 1876); *General Catalogue of Dartmouth College and the Associated Schools, 1769-1910, Including a Historical Sketch of the College, Prepared by Charles Franklin Emerson* (Hanover, N.H., printed for the College, 1910/11); Ralph N. Hill, ed., *The College on the Hill: A Dartmouth Chronicle* (Hanover, N.H., Dartmouth Publications, 1965); William C. Hill, comp., *Dartmouth Traditions...* (Hanover, N.H., printed by Dartmouth Press, 1901); Edward C. Lathem, "Daniel Webster's College Days" (*Dartmouth Alumni Magazine* 45:18-23, Oct. 1952), and "Preface to Dartmouth" (*Dartmouth Alumni Magazine* 47:14-18, Dec. 1954), which discusses Moor's Indian Charity School; Robert S. Monahan, "Stumps and Scholarships: The Story of the Dartmouth Grants" (*Dartmouth Alumni Magazine* 40:13-17, April 1948), which discusses land grants to Dartmouth in the years 1770-1947; Philip G. Nordell, "The Dartmouth Lotteries" (*Dartmouth Alumni Magazine* 45:20-23, 37, May 1953), covering 1784-1800; Wilder D. Quint, *The Story of Dartmouth* (Boston, Little, Brown, 1914); Leon Burr Richardson, ed., *An Indian Preacher in England; Being Letters and Diaries Relating to the Mission of the Reverend Samson Occum and the Reverend Nathaniel Whitaker to Collect Funds in England for Benefit of Eleazar Wheelock's Indian Charity School, from Which Grew Dartmouth* (Hanover, N.H., Dartmouth College, 1933); Franklin B. Sanborn, "Dartmouth College: Its Founders and Hinderers" (*New Hampshire Historical Society Proceedings*

5:73-89, 1917); Baxter P. Smith, *The History of Dartmouth College* (Boston, Houghton, Osgood, 1878); Herbert Thoms, "Nathan Smith" (*Journal of Medical Education* 33:817-26, 1958), who taught at Dartmouth Medical School during 1798-1812 and the Medical Institution of Yale College during 1812-29; and John Wheelock, *Sketches of the History of Dartmouth College and Moors' Charity School, with a Particular Account of Some Late Remarkable Proceedings of the Board of Trustees, from the Year 1779 to the Year 1815* (n.p., 1815).

Wheelock's life and educational career at Dartmouth are best covered by: Jere R. Daniell, "Eleazar Wheelock and the Dartmouth College Charter" (*Historical New Hampshire* 24:3-45, Winter 1969); and James D. McCallum, *Eleazar Wheelock: Founder of Dartmouth College* (Hanover, N.H., Dartmouth College, 1939). David McClure and Elijah Parrish's *Memoirs of the Reverend Eleazar Wheelock* (Newburyport, Mass., Edward Little, 1811) is still of value for early documents and interpretations. The Dartmouth College Library has microfilmed the papers of Wheelock and a guide to this collection has been published: *A Guide to the Microfilm Edition of the Papers of Eleazar Wheelock, together with the Early Archives of Dartmouth College and Moor's Indian Charity School and Records of the Town of Hanover, New Hampshire, through the Year 1779* (Hanover, N.H., Dartmouth College Library, 1971).

Upon its founding in 1769, Dartmouth College already possessed a library collected by Rev. Wheelock, consisting largely of religious tracts, primers, Bibles and theological textbooks, for use in Christianizing and educating Indians in his charity school. These books, plus others donated by friends and supporters in England and Scotland totalled 300 volumes by the time of the appointment in 1779 of John Smith, a professor of classical and oriental languages, who was to begin a 30-year term as college librarian.

A very restrictive code of regulations, limiting the use of the library to officers, students and resident graduates of the college, as well as setting the hours of the library was also issued in 1779.

In 1809 the first printed catalog listing nearly 3000 volumes was issued. Although there were important donations of books during the late eighteenth and early nineteenth centuries, including the Isaiah Thomas donation of 470 volumes in 1819, the library remained small and of inferior quality. This, as well as the problem of limited availability, caused two student literary societies to create their own collections for benefit of their members Further information can be found in Richard W. Morin, "Dartmouth College Libraries," in Allen Kent, et al., eds., *Encyclopedia of Library and Information Science* (New York, Marcel Dekker, 1971, vol. 6, pp. 428-29); Ray Nash, ed., *The Isaiah Thomas Donation, Library of Dartmouth College, Presented by Isaiah Thomas, Esq., A.D. 1819, in His Donation of 470 Volumes* (Hanover, N.H., Dartmouth College Library, 1949); Asa C. Tilton, "The Dartmouth Literary or Debating Societies" (*Granite Monthly* 52:157-69, 202-13, 249-63, 1920); and Lowell Simpson, "The Development and Scope of Undergraduate Literary Society Libraries at Columbia, Dartmouth, Princeton, and Yale, 1783-1830" (*Journal of Library History, Philosophy, and Comparative Librarianship* 12:213-16, 1977).

Attempts to Establish Colleges in the Deep South

One of the few attempts to found a college in the deep south before the revolutionary war was George Whitefield's Bethesda College project. The best descriptions are provided in the works of Mollie C. Davis, "George Whitefield's Attempt to Establish a College in Georgia" (*Georgia Historical Quarterly* 55:459-70, 1971); Robert L. McCaul, "Whitefield's Bethesda College Project and Other Attempts to Found Colonial Colleges" (*Georgia Historical Quarterly* 44:270-77, 381-98, 1960); Theda Perdue, "George Whitefield in Georgia Philanthropy" (*Atlanta Historical Journal* 22:293-305, 1978); David R. Poole, "Educational Work at Whitefield's Orphan School in Georgia" (*Methodist History* 15:186-95, 1977); and W.J. Thompson, "Reverend George Whitefield and the Colonial Colleges" (*Association of American Colleges Bulletin* 26:421-30, 1940). In his "George Whitefield's Bethesda: The Orphanage, the College and the Library" in Martha J. Zachert, ed., *Proceedings of the 3rd Library History Seminar* (Tallahassee, Florida State University, 1968, pp. 47-72), Robert V. Williams includes information not only on Whitefield's attempt to turn the Bethesda Academy into a college, but also on the relationship of its library to the plans for that college. Williams also includes an analysis of a 1771 catalog, which included approximately 1200 volumes and 170 pamphlets, and compares its contents with the libraries of other educational institutions in the American colonies.

Further discussion of the difficulties of founding a college in the pre- and postrevolutionary South is contained in Robert P. Thomson's "Colleges in the Revolutionary South: The Shaping of a Tradition" (*History of Education Quarterly* 10:399-412, 1970). Thomson also astutely concludes that: "When, during the Revolutionary generation, Southerners initiated a sudden burst of college founding but acquiesced in an equally sudden withdrawal of public financial support for them, they made decisions that determined the function higher education would have in Southern society."[24] The article then goes on to explain why they chose as they did.

Two additional works that should be consulted are: E. Merton Coulter, *College Life in the Old South* (2d ed., Athens, Ga., University of Georgia Press, 1951), and O. Burton Adams, "Yale Influence on the Foundation of the University of Georgia" (*Georgia Historical Quarterly* 51:175-85, 1967).

COLLEGES FOUNDED AFTER THE REVOLUTIONARY WAR

Colleges founded after the revolutionary war, on whose libraries we have some basic information, include Dickinson College (1783), St. John's College (ca. 1785), Williams College (1793), and the University of North Carolina (1795).

Dickinson College in Carlisle, Pennsylvania, the second college in the state, was chartered by the Pennsylvania legislature on September 9, 1783. The college was named after John Dickinson (1732-1808), Governor of Pennsylvania and author of *Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies* (Boston, Edes & Gill, 1768), who was its initial major donor. For further information, see Charles C. Sellers, *Dickinson College: A History* (Middletown, Conn., Wesleyan University Press, 1973); James H. Morgan, *Dickinson College: The History of One Hundred and Fifty Years, 1783-1933*

(Carlisle, Pa., Dickinson College Press, 1933); Joseph B. Smith, "A Frontier Experiment with Higher Education: Dickinson College, 1783-1800" (*Pennsylvania History* 16:1-19, 1949). In 1784 Dickinson donated to his namesake about 1500 volumes from the collection of his father-in-law, Isaac Norris the Younger (1701-66). James W. Phillips, in "The Sources of the Original Dickinson College Library" (*Pennsylvania History* 14:108-17, 1947), identifies some 632 volumes bearing a Norris autograph. The books are chiefly on medical, scientific and theological subjects and, interestingly enough, almost none are in English. Marie Elena Korey's *The Books of Isaac Norris, 1701-1766, at Dickinson College* (Carlisle, Pa., Dickinson College, 1976) provides a catalog of 1902 entries, listed alphabetically by author, and an index of former owners. Edwin Wolf II, librarian of the Library Company of Philadelphia, provides a long introductory essay which is a substantial contribution to the history of book collecting in colonial America. On the value of the Norris collection to the students of the day, Phillips concludes that while it contained "items of interest and value to a scholar," it was also "filled with many medical treatises and polemical volumes, which were of little use to the student." He also postulates that the foundation of literary society libraries at Dickinson, the earliest in 1791, "was tacit criticism of the usefulness of the original library."[25] James H. Morgan's *Dickinson College: The History of One Hundred and Fifty Years, 1783-1933* (Carlisle, Pa., Dickinson College, 1933, pp. 409-15) is also a useful source for the early history of the Dickinson College library.

St. John's College in Annapolis, Maryland, was established in 1696 as King William's School, which in turn was merged into St. John's College in 1785. The works of Anne Brown, "The Phoenix: A History of the St. John's College Library" (*Maryland Historical Mazagine* 65:413-29, 1970); Ford K. Brown, *The Annapolitan Library of St. John's College* (Annapolis, Md., printed by Direction of the Board of Visitors and Governors of St. John's College, [1931]); and Sarah J. Klein, "The History and Present Status of the Library of St. John's College, Annapolis" (Master's thesis, Catholic University of America, 1952) all discuss how the St. John's College library became the final location of the "De Biblioteca Annapolitana," the Anglican provincial library of 1095 volumes founded by Rev. Dr. Thomas Bray of London. Tench F. Tilghman's "The Founding of St. John's College, 1784-1789" (*Maryland Historical Magazine* 44:75-92, 1949) briefly describes the early years of the college.

Williams College of Williamstown, Massachusetts, was granted a charter on July 22, 1793. In the following October, Williams began with approximately 25 students and a faculty of 2 members. As both members of the faculty and 7 of the 12 trustees were Yale graduates, they proceeded to imitate Yale's by-laws, curriculum and terms of admission. One surprising innovation, however, appeared in the entrance requirements—French might be substituted for Greek. Four additional professorships were established in the period 1793-1815: law and civil polity in 1794, French in 1795, mathematics and natural philosophy in 1806, and ancient languages in 1815.

A catalog of its early library of about 400 volumes was published in 1794: *A Catalogue of Books in the Library of Williams College, Williamstown* (Bennington, Vt., Printed by Anthony Haswell, 1794). By 1800 the library was estimated to have held 1000 volumes.

The basic histories of the college for the period are by: Calvin Durfee, *A History of Williams College* (Boston, A. Williams, 1860); Arthur L. Perry, *Williamstown and Williams College* (New York, Scribner, 1899); and Leverett W. Spring, *A History of Williams College*

(Boston, Houghton, Mifflin, 1917). John A. Lowe's *Williamsiana: A Bibliography of Pamphlets and Books Relating to the History of Williams College, 1793-1911* (Williamstown, Mass., The Trustees, 1911) and MacGregor Jenkins's *Sons of Ephraim and the Spirit of Williams College* (Boston, Houghton, Mifflin, 1934) are still useful.

The oldest of the state universities, in the actual teaching sense, the University of North Carolina, was chartered in 1789. The first session, however, did not begin until 1795. Around the university grew the town of Chapel Hill. The first president of the university was Joseph Caldwell (1773-1835; president 1804-12, 1817-35), a graduate of Princeton, who early patterned North Carolina after that institution. Although the university was established and controlled by the state, no direct appropriation was made for buildings, equipment or support during the first 90 years of its existence. It was dependent upon donations, certain escheated property, and the fees of the students. Still, it flourished and was progressive and vigorous under President Caldwell.

The following surveys should be consulted for the history of the University of North Carolina: Kemp P. Battle, *History of the University of North Carolina* (2 vols., Raleigh, N.C., Edwards & Broughton, 1907-12); Robert D.W. Connor, "The Genesis of Higher Education in North Carolina" (*North Carolina Historical Review* 28:1-14, 1951), and *A Documentary History of the University of North Carolina, 1776-1799* (2 vols., Chapel Hill, University of North Carolina Press, 1953); Charles L. Coon, *North Carolina Schools and Academies, 1790-1840: A Documentary History* (Raleigh, N.C., Edwards & Broughton, 1915, pp. 641-721); William E. Drake, *Higher Education in North Carolina Before 1860* (New York, Carlton Press, 1964); Luther L. Gobbel, *Church-State Relationships in Education in North Carolina Since 1770* (Durham, N.C., Duke University Press, 1938); Archibald Henderson, *The Campus of the First State University* (Chapel Hill, University of North Carolina Press, 1949); Douglas MacMillan, *English at Chapel Hill, 1795-1969* (Chapel Hill, Department of English, University of North Carolina, 1970); and William S. Powell, *The First State University: A Pictorial History of the University of North Carolina* (Chapel Hill, University of North Carolina Press, 1972).

Brief sketches of the early North Carolina library are provided in: Stephen B. Weeks, "Libraries and Literature in North Carolina in the Eighteenth Century" in *Annual Report of the American Historical Association for the Year 1895* (Washington, D.C., USGPO, 1896, pp. 169-267); Louis R. Wilson, *The Library of the First State University* (Chapel Hill, University of North Carolina Library, 1960), and "First Book in the Library of the First State University" (*College & Research Libraries* 22:35-39, 1961); J.F. Pugh, "The History of the Library of the University of North Carolina" (*University of North Carolina Magazine* 44:207-13, 1914); Carolyn Patricia Martin, "North Carolina Collection in the University of North Carolina Library (Master's thesis, University of North Carolina, 1961); and Jane C. Bahnsen, "Collections in the University of North Carolina Library Before 1830" (*College & Research Libraries* 20:125-29, 1959). A bibliography of the books known to have been in the library before 1830 is contained in Jane C. Bahnsen's "Books in the University of North Carolina Library Since Before 1830" (Chapel Hill, University of North Carolina Library, 1958, manuscript).

UNDERGRADUATE LITERARY SOCIETY LIBRARIES TO 1800

Small and inadequate college library collections, limited hours, restrictive policies, and most importantly of all, the lack of the type of reading matter wanted by many of the students, were the major reasons undergraduate literary societies developed libraries of their own. Of course, one must keep in perspective the fact that the content of colonial libraries reflected the particular college and its curriculum. In addition, as Simpson notes:

> As with other society activities of this period, the colleges looked upon the society libraries as extensions of a formal college education. Perhaps this is why nowhere in the records of any of the societies is there mention of harassment by administration or trustees. They, too, saw the value of the libraries as educational tools. Therefore, it may be said that, rather than competing with each other, the college and society libraries were complementary. Much as with the formal college curriculum, the society libraries served to broaden the educational environment.[26]

The members of these societies typically gathered to listen to debates, hear their fellow members read speeches and poems, discuss contemporary literature and judge declamations.

Among the few studies published on early American literary societies, the following should be consulted: Thomas S. Harding, *College Literary Societies: Their Contribution to Higher Education in the United States, 1815-1876* (New York, Pageant Press, 1971); James McLachlan, "The Choice of Hercules: American Student Societies in the Early Nineteenth Century," in Lawrence Stone, ed., *The University in Society* (Princeton, N.J., Princeton University Press, 1974, vol. 2, pp. 449-94); and Henry D. Sheldon's classic *Student Life and Customs* (New York, Appleton, 1901), and *The History and Pedagogy of American Student Societies...* (New York, Appleton, 1901). Specialized society histories include: Jacob M. Beam, *The American Whig Society of Princeton University* (Princeton, N.J., The Society, 1933); Charles R. Williams, *The Cliosophic Society* (Princeton, N.J., Princeton University Press, 1916); George M. Giger, "History of the Cliosophic Society," in *Proceedings and Addresses at the Celebration of the One Hundredth Anniversary of the Founding of the Cliosophic Society* (Philadelphia, Sherman, 1865); McLachlan's work (1974), which emphasizes Princeton University societies, and his "Classical Names, American Identities: Some Notes on College Students and the Classical Tradition in the 1770's," in John W. Eadie, ed., *Classical Traditions in Early America* (Ann Arbor, University of Michigan Center for Coordination of Ancient and Modern Studies, 1976, pp. 81-98), in which he discusses classical costuming and the Greek and Roman names assumed by members of Princeton's Cliosophic Society, suggesting that classical models were a very important part of the "undergraduate thought" of the era; Joseph H. Choate, "The Hasty Pudding Club," in his *American Addresses* (New York, Century, 1911, pp. 143-50); Mildred R. Woodward, "The Athenian Society of Queen's College" (*Rutgers University Library Journal* 3:13-19, 1939), whose brief review is based on the "Transactions" of the Society for the years 1776-86; Asa C. Tilton, "The Dartmouth Literary or Debating Societies" (*Granite Monthly* 52:157-69, 202-13, 249-63, 1920); Julius H. Tuttle, "The Philomusarian Club, Harvard College, 1728" (*Publications of the Colonial Society of Massachusetts* 18:79-84, 1917), which prints the articles of the club from a manuscript in the American Antiquarian Society, followed by brief biographical notes of the members; Helen P. Roach, "The Early Speaking Societies at Columbia College" (*Bulletin of the American Association of University Professors* 41:639-44, 1955); and Arthur T. Vanderbilt, "An Example to Emulate" (*South Atlantic Quarterly* 52:5-19, 1953), in which the author describes the early history of Phi Betta Kappa at the College of William and Mary for the years 1776-81.

Information about literary society libraries is included not only in the above-mentioned Simpson study, but also in those of Harding (1971); McLachlan (1974); Roscoe Rouse, "The Libraries of Nineteenth-Century College Societies," in David Kaser, ed., *Books in America's Past: Essays Honoring Rudolph H. Gjelsness* (Charlottesville, University of Virginia, 1966, pp. 25-42); and Catherine P. Storie, "What Contributions Did the American College Society Library Make to the College Library?" (Master's thesis, Columbia University, 1938). Storie lists sources for locating college society libraries (pp. 8-28) and catalogs of college society libraries (pp. 29-51). An abbreviated version of Storie's thesis was published as "The American College Society Library and the College Library" (*College & Research Libraries* 6:240-48, 1945).

Early literary societies for which libraries are known to have existed include Yale's Critonian Society (founded 1750), Linnonian Society (1753) and Society of Brothers in Unity (1768); Brown's Philermenian (1794), Prouncing (1771), and United Brothers (1806); Dartmouth's United Fraternity (1786) and Society of Social Friends (1783); Princeton's The American Whig Society (1765) and the Cliosophic (1765); William and Mary's Flat Hat Club (1750) and Phi Betta Kappa (1776); Queen's Athenian (1776); Harvard's Institute of 1770, Phi Betta Kappa (1781), Porcellian (1791), and Hasty-Pudding Club (1795); Dickinson's Belles Lettres (1786) and Union Philosophical (1789); Williams's Philologian (1795) and Philotechnian (1795); North Carolina's Dialectic (1795) and Philanthropic (1795); King's Philolexian (1802) and Peithologian (1806); and Pennsylvania's Philological (1807) and Philomathean (1813). However, catalogs of the libraries did not begin to be published or printed until the first quarter of the nineteenth century.

SUMMARY AND CONCLUSION

This bibliographical study of colleges and their libraries established during the colonial and early national periods of American history has been concerned with both institutional histories and with the availability of books and the nature of the book collections in these institutions' libraries.

However, as was discussed throughout the essay, one must not assume that because books were available in these colleges, the libraries functioned in somewhat the same manner college and university libraries do today. The role of the college library was limited by the curriculum of the early American colleges—the subjects taught, the methods of teaching and learning, and the academic preparation of the teachers and students—as well as the availability of books in the libraries.

The curriculum of studies in the early American college was modeled closely on the program of studies in Cambridge, the alma mater of the majority of university men in the New England colonies. Since Cambridge was the model for the Harvard curriculum, Harvard studies were classical and scholastic in method and in the choice and treatment of subjects. Instruction was carried on by lecture, by steady application to a single text for each subject, and by formal disputations carried on according to the rules that had been in use in the universities of Great Britain and Europe for centuries. Harvard differed from the British model in including the study of Hebrew and other Oriental languages as tools for reading the Old Testament, and in making certain that all students received instruction in the leading puritan theologians. Neither the method of instruction nor the choice of subject was hospitable to extensive use of a college library as a part of the undergraduate instruction of a college student. For students who remained in college to study beyond the bachelor's degree, however, the situation was reversed. From the beginning of Harvard's history, bachelors of arts were given liberty to study in the library, where under the guidance of the college president or the professor of divinity they were expected to read widely for 3 years, not only in theology but in other subjects as well, to qualify for the master's degree.

Both Yale and the College of New Jersey followed the Harvard curriculum closely, but by the middle of the eighteenth century several important, well-defined and yet interrelated changes began to appear in the 3 established colleges and in the new colleges at Philadelphia and New York. One of these changes was simply that college teachers formerly assigned to teach all subjects to a given class were now assigned a subject to teach to all classes. Specialization in theology had been brought about by the appointment of the Hollis Professor of Divinity at Harvard as early as 1722. The establishment of professorships in mathematics and natural philosophy, and in Hebrew and other Oriental languages at Harvard followed in 1727 and 1764. By 1766 tutors were also assigned to subjects rather than to classes. Other colleges followed this example within a few years; the delay was due in most instances to a lack of funds to provide professorships rather than to a lack of desire to develop specialization among the faculty. Another change was the decline of scholasticism, including not only the formal disputation but the dependence on syllogistic logic as a pedagogical device. Public speaking was not abandoned but the method was changed to forensic debate in English on a variety of subjects. In colleges where reading and recitation in Latin had been required for all subjects, textbooks and lectures in English came into common use by 1750. Latin and Greek remained important studies but were considered useful as models of eloquence and rhetoric rather than as media for studying other subjects. Although some science was included in the earliest Harvard curriculum and astronomical observations were carried on during the seventeenth century, the study of science as an experimental subject and the emergence of the separate disciplines of mathematics, chemistry, natural history and geography from the all-inclusive field of natural philosophy were encouraged largely by the writings of Newton and his many popularizers and interpreters. The development of college studies in botany, zoology and chemistry came largely as an aid to the study of medicine. Finally, more attention was given to the political education of college students through lectures on students' responsibilities as citizens and through courses in moral philosophy, usually taught by the president and including much of what we would call politics and government.

Although each of the college libraries has its own history, all have a number of points in common. The early records of each college contain in some fashion a statement of the intent to provide a library as an important part of the college. The growth of all of the libraries was highly dependent on the gifts of interested patrons in this country and in England because funds were simply not available for any expenses beyond those required for bare subsistence. From these gifts, the colleges accumulated libraries of some substance, and found it necessary to draw up regulations that would both save the books from being stolen or damaged by careless use and permit their use under appropriate conditions. All of the libraries suffered some losses by war and by fire; the College of New Jersey and King's College libraries were almost completely lost during the Revolution, and fires destroyed Harvard's 5000-volume collection in 1764 and a much smaller collection at the College of William and Mary in 1705. By the close of the eighteenth century Harvard had rebuilt her library to a collection of more than 9000 titles, Yale had grown more slowly to a collection of about 1800 titles, and smaller collections were available at each of the other colleges.

The printed catalogs and donors' lists provide, with varying degrees of accuracy, a record of the library resources of each of the colleges at various dates, ranging from the 300 titles traditionally ascribed to the donation of John Harvard and the 157 titles collected for the College of William and Mary by Francis Nicholson, to the excellent collection in the Harvard library of 1790. Although there are too many variations in the distribution of subjects in these collections to enable one to describe a hypothetical "typical" college library, there are enough similarities to provide some generalizations. About one-half of the books were works of theology; books pertaining to history made up 12-14% of the collections; literature, 11-15%; science, 7-12%; and philosophy, 3-8%. Books on government, geography, biography and law constituted a little more than 1% each in the book collections, and works on commerce and arts accounted for less than 1%.

The question which remains is: to what extent did the students make use of the libraries available to them? The answer must be drawn more from inference than from direct evidence. We know from the library regulations that at first, only the students studying for their second degrees were expected to use the library, but these regulations were gradually changed to encourage seniors, then juniors, and by the middle of the eighteenth century, freshmen and sophomores to use the library. Not only were the lower classmen permitted to use the libraries, but at Yale specific titles were marked in the catalog for their special attention and at Harvard a collection of books was set aside for undergraduates. The list of books in use at the time of the Harvard fire in 1764 makes it clear that the members of the senior class borrowed a considerable number of books for use over the fateful Christmas holiday. In addition to the course of reading planned for the students at Yale by Rector Clap, extensive reading lists were prepared by William Smith, provost of the College of Philadelphia, and by Samuel Johnson, president of King's College. Many books appeared on all 3 lists and each of the lists was related to the curriculum of studies. Although it is highly unlikely that students read all the books that their college presidents thought they should read, extant personal reading lists suggest that some students did read widely. Although there is insufficient evidence to show a direct relationship between the books in the college libraries and the curriculum of studies of the colleges, the major changes in emphasis in the curricula—instruction in English rather than in Latin; a greater emphasis on science, history and modern literature; and the development of subject specialization among the faculty—were accompanied by similar changes in the book collections of the colleges for which library catalogs are available.

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VITA

David S. Zubatsky is currently a library science doctoral student at the University of Illinois at Urbana-Champaign. He is a graduate of the University of Wisconsin, having received a BA in Spanish in 1962 and an MA in History in 1966, and of the University of Illinois where he earned an MSLS in 1967. Mr. Zubatsky was formerly associated with Washington University in St. Louis, where he served as Latin American bibliographer, chief of the acquisitions department, and assistant university librarian for technical services and automation from 1967 to 1978. He has held several offices in the American Library Association, including Chair of the Collection Development Committee, Chair of the Technical Service Directors of Medium-Sized Research Libraries Discussion Group, and Chair of the Collection Development Officers of Medium-Sized Research Libraries Discussion Group, all of the Resources and Technical Services Division.

In addition to articles, bibliographies and book reviews published in journals such as *Hispania, Interamerican Review of Bibliography, Luso-Brazilian Review, Library Quarterly*, and *Library Resources and Technical Services*, he has coauthored *Recommended Procedures for the Internal Financial Auditing of University Libraries*, a study funded by the Council on Library Resources.

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